

FARMER'S ADVOCATE

AND HOME JOURNAL

THE ONLY WEEKLY AGRICULTURAL PAPER IN WESTERN CANADA

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AUGUST 21, 1907

WINNIPEG MANITOBA

VOLUME XLII, NO. 778

Stanley Rackham
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WINNIPEG, MAN.

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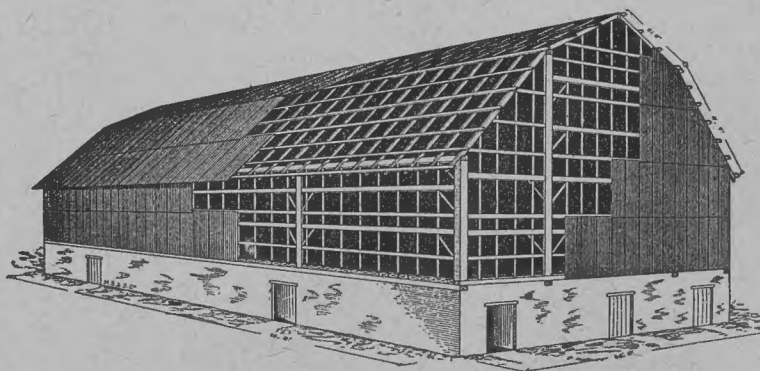
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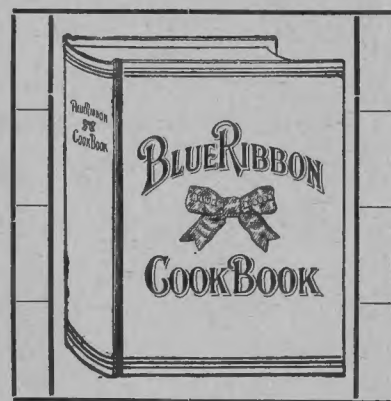
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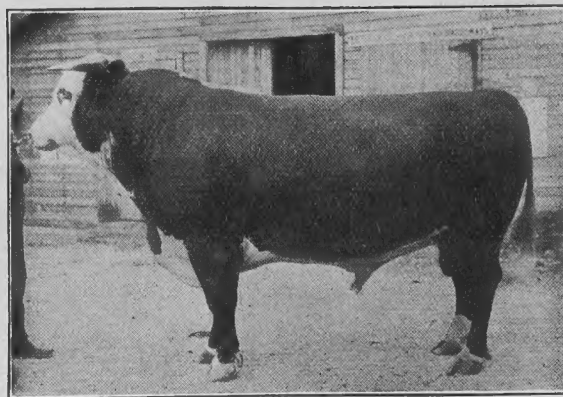
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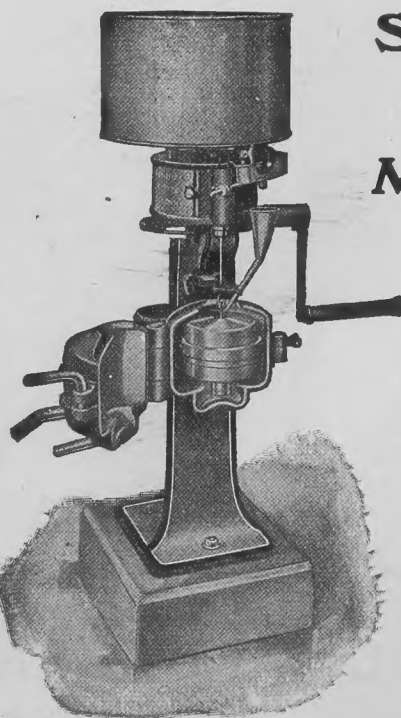
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Farmer's Advocate

and Home Journal

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August 21, 1907

WINNIPEG, MANITOBA.

Vol. XLII. No. 778

EDITORIAL

Comparative Crop Estimates.

A request comes to us to give some data for comparisons between the cost of raising farm crops in the States and in Western Canada. To do this accurately would be too big a task for the publishers of this paper, for the reason that the statistics for very much of the tables would have to be collected at first hand. In a broad general way, however, the advantage is with Western Canada on account of land being lower priced, newer and more fertile here than in the States, so much so in fact as to leave an advantage after the handicap of higher priced labor has been overcome. This is of course, upon the assumption that the general average of land values in Canada is lower than in the States, a perfectly sound assumption. But there may be individual farms and localities in the States where land is lower priced and more fertile than certain farms and certain districts in Canada, and as a consequence farm crops could be produced cheaper than in Canada.

The comparative cost of producing a crop must be arrived at by making comparisons of those items in the cost that can be directly charged to it, leaving out of consideration the returns from the crop which in actual estimates would have to be considered in arriving at the profit. These direct charges are labor, including the operations of all machinery with its depreciation, and handling the crop, seed, twine, and the rental charge of the land. Upon such a basis it will be seen at once that the lower rental charge against the land is the only advantage that Canada can have against older districts, unless it is the case that our land requires less cultivating than that in older districts, and this as a matter of fact is quite often true.

The man who has purchased land for \$10 an acre is slow to realize that when land values have appreciated to \$50 an acre the value of the product above the cost of production must be nearly five times as great to yield the same rate of profit. Fifteen bushels of wheat per acre at 70 cents per bushel on \$10 land will return a profit of 60 per cent. on the investment, but the profit is diminished to 6 per cent. on the \$50 land.

Statistics have been gathered of the cost of producing a crop of wheat in the state of Minnesota, the items of which are as follows:

Seed.....	.80
Cleaning seed.....	.03
Plowing.....	1.06
Harrowing.....	.27
Seeding.....	.27
Weeding.....	.08
Cutting.....	.33
Twine.....	.18
Shocking.....	.12
Stacking.....	.44
Threshing (labor).....	.20
Threshing (cash).....	.34
Machinery rental.....	.34
Land rental.....	.80
Total, per acre.....	\$6.26

These are about the average figures for the American wheat growers.

So far no official statistics have been collected for Western Canada, and in view of the significance of rental charges in the cost of production it is doubtful if such data would be of much value in this enquiry, since land varies with us from ten to fifty dollars per acre within a radius of forty miles, depending not upon its productive power, but upon its location in respect to markets.

We have, however, Mr. Benson's memorable estimate for the tariff commission, which when published in these columns, though challenged, had many an endorsement from practical lifelong wheat raisers. This estimate placed the growing of wheat upon such a low basis that there was scarcely a profit to be found in it. Others will place all charges against a crop of wheat as grown in Western Canada about equal to those against States grown wheat quoted above, with the exception of the rental charge, which is probably on an average nearer one dollar than one eighty as given above.

These estimates are for a crop averaging about fifteen bushels to the acre. A heavier crop would cost but little more for the labor of handling and threshing, but the profit would be considerably greater as the first charges must be set down against an acre whether it yields fifteen or fifty bushels. In this principle lies the secret of success in crop growing; namely, to increase the returns of a crop very considerably over the cost of production, for beyond a certain point the returns from a crop are always out of proportion to the increased cost of handling it.

How the Laborer's Position Compares.

In discussing this problem recently, we stated that church, school, platform and press had tended, by broadening the individual citizen's outlook and stirring humanitarian impulses, toward an ultimate betterment of the laborer's position, while hand in hand with these agencies had gone invention, which intellectualized labor and stimulated it to organize and obtain increasing remuneration for its toil. Well that such influences have been at work, for, on the other hand, modern industry and finance, by centralizing and monopolizing manufacture, and fleecing the gullible public by floating watered stock and by various other forms of organized extortion, aided by protective tariffs and unjust taxation, have unquestionably brought about the concentration of much wealth into a few hands, especially on the American continent. It is these few and the middle classes who set our standards of living, dictate the expensiveness of our fashion, and are responsible for the heavy economic loss which results from the frequent changing of styles in every thing, from boots to millinery.

It must be admitted, to a large extent, that the standard of living varies with the age and the neighborhood in which one lives. The father who resists his son's appeal for 30 cents to join a baseball team, by telling him how little money he had to spend when a boy, is using an unfair argument. It is easy to do without things one never has had, particularly if his neighbors haven't them, either. It was no embarrassment to wear fresh-greased cow-hide top boots to school or church when all the other boys were doing the same, but it would sting the spirit of the least sensitive lad to be the only one wearing such foot-gear in public. The young couple who have come West to rough it on a homestead, think lightly of the deprivations, because their neighbors are in much the same straits. Had they remained in the East, they would have found it necessary to spend more for furniture and clothes. So it will not do to compare the working man's wages to-day with those he received ten or twenty years ago, and jump to the conclusion that he can have no possible cause for complaint. Rents have increased at a feverish rate, the cost of most staple lines of goods has risen considerably since then, besides which there are many new demands upon his purse. The working man of to-day aspires—and quite properly and worthily aspires—above the position of a mere clothopper. His own self-respect and the interests of his family demand that he conform, in so far as his means allow, to the usages and amenities of civilization. The city laborer has his water rates to pay, his rent or taxes and interest, his electric-light or gas bill, his street-

car fare, and an occasional railroad trip, to say nothing of the hundreds of other items that bulk so large in the course of a year. He probably feels, also, that his home is incomplete without a musical instrument of some kind. And why shouldn't he be entitled to these things, when his employer is riding around in a five-thousand-dollar automobile, and sending his daughter on a trip to Europe? Fashion dictates the luxuries of the rich, and no one raises a hand of protest, no matter how dishonorably the money that buys the luxuries has been obtained. Yet there are plenty of people who dwell with horror on the "increasing extravagance" of the poor, and if they find a laborer who is profligate or drunk, how ready they are to point their cut-and-dried conclusion that prosperity, beyond a frugal living, is no benefit to the working man. By these same critics, the indulgences and misdeeds of the well-to-do are tolerantly condoned, especially if they happen to be liberal supporters of public benefactions. We talk considerably about equality and democratic privileges, but a great many of us who laud these things in the abstract do not think or act accordingly when it comes right down to the point in the form of a concrete instance.

The general conclusion to be drawn from the foregoing paragraphs is that, while the unmistakable tendency of modern times, especially in the New World, has been towards an improvement of the laborer's position, still the real betterment to date is not so great as commonly supposed, for, while the average of intelligence, comfort and culture in the laborer's family is undoubtedly advancing, the relative positions of the average working man and the average capitalist employer are about as far apart as ever they were, and the laborer who seeks to conform reasonably well to the demands of the present-day civilization must needs calculate about as closely as did his prototype of earlier times.

The Natural Way.

The globe-trotter is impressed with certain unvarying circumstances when he begins comparing conditions in different agricultural countries. These are, that where there is a natural proportion of males and females in the population, there will prevail neat, well-kept homesteads and where the relative proportion of men is greater than of women, there the farmsteads are less inviting, the borders of the fields are dotted with the flowers of weeds, and about the house and barns will be found hedges of weeds breast-high, rank and defiant. These circumstances are intimations of the direction in which to work to find a solution of the vexed labor problem and a remedy for dirty farms. Where there are wives to be had men and women usually marry and troupes of boys and girls gladden the days of their parents; the forces of humanity increase and humanity is ever by instinct the enemy of thorns and briars. These reflections lend color to Mr. McKellar's plea in last week's issue for the offering of more inducements to female immigrants. The only real cure for weeds is manual labor and in our country the opportunities for weeds to flourish have become out of all proportion to the labor to combat them. Added to this there is always present in every individual a desire to clean up the person and surroundings just as we all at about fourteen years of age begin to wash behind our ears and brush our matted, tangled heads. The influence of a woman upon the tastes of a man, even if it is only temporary, is most significant. Woman is the salvation of our farms.

Some Needed Reforms.

EDITOR FARMER'S ADVOCATE:

Farming in the West is undergoing a change, is in a sort of transition period, and as a consequence many problems are cropping up for solution. Some of these concern the production end of the business, some the selling end, and some the social. Considering the first mentioned, the one which receives the larger share of the farmer's attention and at which he is now busily engaged, many interesting points present themselves. One of the primary requisites of the production end is labor, which at present is beginning to give the farmer some anxiety. Requisitions sent in from the various centers for men, indicate that a considerable amount of extra help will be required this year, while a consideration of the labor market indicates that the available supply is none too large. While railroad construction is not extensive as was last year expected, it engages the employment of a larger number of men and cuts down considerably the number available for farm work.

Little as yet is definitely known regarding the number that will avail themselves of the excursions which start from eastern parts in a short time, but already officials from the two provincial Departments of Agriculture are making preparations for their reception and distribution. Take the province of Saskatchewan alone. At date of writing, August 10th, applications for 5,500 men have already been received by the Department of Agriculture and Mr. Hedley Auld, chief of the Bureau of Statistics, states that 8,000 is a conservative estimate of the number that will yet be required and that in all probability another thousand will be necessary to harvest this year's crop. Last year 8,066 men were actually distributed, but this year, although there is an increase of 15% in the average, all of which will likely be harvested, the yield over the province does not promise to be so high so last year, which was phenomenal. Much will depend on the weather from now on, as regards yield, and in the matter of the number of men that will be required to harvest the crop.

To the thoughtful the question of just how long we can depend for our harvest help on these excursions, must have presented itself. The supply in the East is not by any means inexhaustible. In fact, the farmers there have been for a number of years complaining that the West was taking the best of their young men, lessening the available supply of farm help, necessitating a change in their methods of farming on that account and in some districts causing a depreciation in the value of farm land. This is in the main true. There are on record statistics that go to show that a considerable proportion of those that come out on the harvest excursions remain in the country; some go back East only to return later, while some go back and stay there. As long as our supply of homesteads and low-priced land holds out, and as long as it is to the interests of the railways to run them, we can count on excursions, but the number in the East taking advantage of them cannot continue as it has been doing. There are not enough young men. The demand here is constantly growing while the source of supply is decreasing. Recently an ingenious citizen of the Republic to the south advanced the idea that a sort of international harvesting gang be organized and follow the harvesting of the crops from South America up through the States and into Canada. It looks easy and some day may be put in practical operation, but it is doubtful if the Western farmer can count on that for the solution of his labor difficulties. He can, however, depend on a supply from another source, Great Britain. The excursions run by the C. P. R. last year when some 1,800 laborers were brought from England direct to the West, demonstrated what could be done in this direction. The supply in Ontario and the farther East will not fail for some time. Each year sees shipload after shipload from Great Britain and other European countries, land in Canada, induced to come by the available homesteads in the West. But so urgent is the Ontario farmer's demand for help that a large number of these are intercepted. Many of them, however, only remain for a year or two; then after receiving a training in farm work they take the excursions to the West. It is largely on these that the promoters of the excursions and those they are designed to benefit must ultimately rely.

But is the West, in harvesting her crops, always to require a large number of men for a short length of time? Are we always going to

warrant the title "the flour barrel of the world"; to confine our attention and place our dependence in one crop alone; to strain every muscle of our bodies during seeding; to take just enough gentle exercise for a pleasant healthy appetite while the crop is ripening and then to rustle up harvest-help, anything that looks like a man, and to go at it again in harvest-time like a whirl-wind? Present indications are that an opportune time is at hand for a change. Wheat growing on account of the relatively small initial outlay required, the quick and frequently abundant returns that can readily be converted into cash, is the ideal crop for the homesteader or the beginner. But it cannot be wheat, wheat, all the time. The land will not stand it and the farmer's duty to his family demands that he leave them a farm in good condition and not one from which almost everything but weeds has been taken.

The experience of the past is the teacher of the present, and it is no less the prophet of the future. We can learn much from other countries or different districts of the same country. Agriculture in older parts was years ago much the same as it is here now, that is to say, they grew wheat, wheat, wheat, and kept at it until the land got sick of the job and finally so weak that it refused to produce a paying crop. Then they quit wheat and tried to coax the land to grow something else, but while it did better at that it was too weak and worn out to return a good profit. Then they got sore on it and those of them that could lit out for the towns and cities. Are we drifting in the same direction? To the writer if he reads the sign aright, there are three facts indicating in the case of the older established farms the necessity for a change. The scarcity, frequent inefficiency and high price of farm labor that is hired for a few months only, the alarming increase and spread of noxious weeds and the depletion of fertility, the decline in the soil's crop producing capabilities, comprise the three. More mixed farming must be done if these difficulties are to be overcome. This is not equivalent to saying to every farmer, "Go into the stock business," for on some farms, the newer ones, the beginners will find wheat will return a quicker profit on a smaller investment. Their land being new will stand and in some cases improve with continuous cropping with the one crop for a few years. But this cannot be continued. While wheat may still be a staple crop, a system of farming which will keep down weeds, conserve fertility, keep the land in good condition, enable the farmer to keep his labor the year round and at the same time return a profit, must be worked out.

The unsatisfactory nature of our labor supply is only too apparent to every farmer; the necessity for prompt, vigorous, intelligent action in regard to the weeds cannot fail to have escaped his attention, especially this season, and the reduction in his yields to the acre must have forced itself rudely upon him before now. These are the facts that have presented themselves to us repeatedly. How much longer are we to ignore them, to procrastinate and to delay the working out of a remedy? Many have sought a remedy, but the great majority still refuse to act. A rotation is necessary. A judicious mixture of grain and grass growing and stock raising, with the manure back in the land, brings about the desired result. There are a number of different ways in which this may be accomplished, but enough has been said to convince the most obdurate of the necessity for a change in the direction indicated. The manner in which he works it out must be determined by himself; no hard and fast rule can be laid down as what suits one farm may not give the best result on another. However, much can be learned from the methods of another. Contributions on the subject are useful and helpful.

Sask.

J. S.

The Good Work of Clover.

The reports we have received this season of flourishing crops of red clover in different parts of Manitoba are most gratifying to us, since we have so persistently advocated the growing of this crop to fertilize and renovate the soil. The determination with which some farmers have persisted in sowing clover seed and in changing conditions to try to find the best treatment to get a catch is deserving of the commendation of every well-wisher of the country, and merits the gratitude of every farmer. In the action of the clover plant upon fields that have been long cultivated we believe the solution of the problem of moisture conserving and of firming the soil will be found, and if the crop is persisted with, it will prove one of the strongest enemies of weeds. Successful growers are invited to give the fact every prominence.

HORSE

Judging at Regina.

EDITOR FARMER'S ADVOCATE:

In looking over your report of Saskatchewan's provincial exhibition at Regina I notice some omissions and misleading statements which I would like to correct.

The judges were asked by the directors to select a male champion and reserve, also a female champion and reserve. We placed the Van Horne horse, Lord Ardwell, for champion (already mentioned) and Baron of Arcola for reserve (not mentioned). In the female class Mr. P. M. Bredt's four-year-old, Irene, was placed champion and W. H. Bryce's yearling, Lady Montrave Ronald, reserve champion; in the later class the assistance of Dr. Folmie of B. C. was called and he reversed my judgment, placing the four-year-old ahead of the yearling filly.

In the Clydesdale teams the judgment of Mr. Gibson and Prof. Rutherford was not reversed as stated, as Rosadora took the place of Lady Rotha and made a different turnout.

Regina.

TULLY ELDER.

[We are aware that we had made an error in naming Lady Rotha instead of Rosadora, but that does not alter the case perceptibly, for Mr. Gibson placed Lady Rotha over Rosadora in their class. We gladly make the correction in the names. As for the reserves for championship, we are glad to have their names, as it is often difficult to watch all rings of stock when the judging is going on, but we must admit that we were under the impression that the competition in the female championship was between Irene and Baron's Lassie and supposed the second choice was the reserve.—Ed.]

Brood or Yeld Mare.

EDITOR FARMER'S ADVOCATE:

As I am interested in horse judging and horse showing, I am anxious to know how it is that the same horse, I mean Lady Rotha, was shown in the brood mare class at Regina Spring Show and as a yeld mare at the Winnipeg Exhibition. I think a judge should use his eyes and not give a yeld mare a prize in the brood mare class, nor a mare in foal a prize in the yeld class.

Summerbury, Sask.

J. B. L.

[These matters are very largely regulated by the rules in the prize list. Lady Rotha, whatever she may have looked at Regina, has since been proved to have been in foal. At Winnipeg the prize list insists that a brood mare must have a foal by her side and as Lady Rotha did not foal until after the exhibition she was not eligible to be shown in the brood mare section, but was eligible in the yeld mare class. Personally we think the rules governing the brood mare class should be somewhat flexible, so that a mare that gives evidence of having raised a foal or of being in foal would be eligible. At spring shows it is difficult to decide very often when a mare is not due to foal until late, whether she is more properly a brood or a yeld mare and exhibitors should be willing to abide by the rules of the exhibition board.—Ed.]

Darnley and Prince of Wales.

EDITOR FARMER'S ADVOCATE:

I notice an excellent article in your valuable paper on these two celebrated sires, and from personally knowing these two noted horses I think the writer does ample justice to them, but falls into the common error of not doing justice to Prince of Wales' back breeding; but of course, Clydesdale fanciers do not like to acknowledge the English cart horse blood which undoubtedly ran through his veins. The secretary of the Clydesdale Horse Society a few years ago was advancing something like the same theory as your present writer puts forth, but the breeder of Prince of Wales came forth and distinctly proved one of his granddams as having been bred in Derbyshire and the other granddam in Warwickshire, from which counties they were taken north by dealers. If any of your various readers had seen Prince of Wales I am sure they would have been able to detect the Shire in many points of his formation, and again seeing that both of his granddams were grey in color I

think that conclusively proves that there was other than Clyde blood there. Mr. Nichol Fleming, the breeder, published his letter in the *North British Agriculturist* and his statements were never contradicted and I think he would be in the best position to know the breeding of Prince of Wales, and from his personal experience of the old Scotch horse dealers who used to come and buy draft fillies in England and carry them through into Scotland before any Studbooks were formed, personally knowing the farm bailiff who was present when Prince of Wales was born and from conversation with him quite recently he said the granddams were undoubtedly English cart mares. Of course I see the difficulty the sure Clydesdale men have in taking the old Prince's breeding, and I have watched their various efforts to get his two Shire crosses eradicated for thirty years. Why not acknowledge it and be as they have had to be with several more so-called Clydesdales? No, I am afraid this Canadian rule will cause trouble in the camp across the water and destroy their only market.

DRAFT HORSE.

A Question of Sex in Foals.

EDITOR FARMER'S ADVOCATE:

In a previous issue of your very valuable journal I read "that ten Clydesdale mares had foaled at 'Doune Lodge' and that nine foals are males." I also see in other columns the theory advanced that breeding in the morning produces males, whilst an evening embrace results in females. I have made enquiries at Mr. Bryce's stables and learn that to date eleven mares have foaled and that there are ten males and one filly resulting, and that his mares are invariably bred in the evening. Such a preponderance of males is singular and affords room for research. Might I ask that you institute enquiries along this line for the benefit of those of us who have not such an opportunity for enquiring or abilities for deducting and summarizing.

Sask. WM. E. RAMSAY.

[We should like to accommodate our correspondent, but we have studied the question so much without arriving at any definite conclusion that we are not disposed to pursue it. In fact, we are just about convinced that neither time, place, age, temperature, health, or any external, visible controllable circumstance has anything to do with the determining of sex in unborn animals. We are, however, willing to assist any person who wishes to conduct further investigations into this matter.—Ed.]

Color in Horses.

Breeding to color in horses has long been a subject of more than ordinary interest, and Sir Walter Gilbey, Bart., is the latest author to give the world his opinion upon the matter as it applies to Thoroughbreds, Hackneys and Shires. Sir Walter explains the different colors in horses, and the reason for the increasing frequency of some and the decrease of others. Suggestions are also offered as to how horses may be bred to color. Sir Walter's ideas upon chestnut Hackneys are especially worth repeating. The reason why the color is becoming more common is easily explained when we glance at the "color pedigree" of the best modern Hackney stallions. Danegelt (foaled 1879), a most successful sire, was a whole-colored dark chestnut; his sire, Denmark (foaled 1862), and his grandsire, Sir Charles (foaled 1843), were both chestnuts. Performer (foaled 1840), the sire of Sir Charles, was a brown. The chestnuts may be said to have lain dormant for a few generations, as Performer traces back to Jenkinson's Fireaway, whose sire, Driver, and grandsire, The Original Shales, were both chestnuts.

The success of chestnut Hackneys at the most important shows held during recent years, is a matter of common knowledge; it has been noteworthy ever since the date of the establishment of the Hackney Horse Society, in 1884. As a natural consequence, the services of these chestnuts have been in great demand by breeders, and the color has been inherited with other characteristics by the progeny. There can be no doubt but that the chestnut is an impressive color; in other words, that it has a strong tendency to reproduce itself. A chestnut mare, put to a stallion of the same color, will almost certainly throw a chestnut foal. To illustrate the truth of this, it may be mentioned that during the fifteen years, 1891 to 1906, considerably more than 100 chestnut foals were bred at the Elsenham stud by mating

mares of this color with Danegelt and his son, Royal Danegelt, both of which were chestnuts.

Sir Walter traces, also, the coloring of grey, bay, and brown, and roan Hackneys, and his findings make a capital study. In the same style he treats the original color (and those developed since) from the racehorse, and the many-colored Shires. Illustrating his work are many excellent illustrations, from Sir Walter Gilbey's private collection of paintings. They include Mr. Fulwar Craven and his Norfolk Hackney; Grey Diomed, the property of the Duke of Bedford; Danegelt, and other noted horses. The volume is full of interesting and instructive information, and will be read with profit by breeders and others.—*Live Stock Journal*.

Lameness in Horses.

(Continued.)

The examiner, having satisfied himself which leg the horse is lame in, must now endeavor to find out the seat of its cause. In all cases where doubt exists as to the seat of lameness, it is good practice to remove the shoe and examine the foot carefully; and if he fails to find anything wrong there, he must endeavor to find out where the lameness is by a careful manual examination, assisted by observing the peculiarity of action, which will be discussed later on, as the various lamenesses are observed.

Lameness is not of itself a disease, but a sign of it. It is the expression of pain or inability, the result of disease, accident or malformation in the limb or limbs in which it is manifested. It may, however, arise from disease apart from the limbs, as from injury to or disease of the spinal cord, from disease of the brain, disease of the arteries or nerves, and occasionally from disease of the liver. It may exist for a time independent of disease—a mere expression of pain without actual disease, as from a stone in the shoe or a badly-fitting shoe, but if these causes of pain and lameness exist for any length of time, inflammation is sure to follow. Disease much oftener exists in a limb without lameness than lameness without disease. Thus, a horse may have a wound, ulcer, bony deposit, a tumor, or other diseased condition in a limb, without showing lameness. Some authorities claim that any impediment in action is lameness, while others claim that lameness cannot exist without pain, and that where disease which interferes with action but does not cause pain exists, it causes stiffness, but not lameness. For example, the fracture of a bone or inflammatory action in a joint may result in ankylosis (the union of the bones into one by bony deposit) of two or more bones of the joint, which, when inflammatory action has ceased, causes no pain, but interferes more or less with action, causes the horse to go stiff. Again, complete dislocation of the patella (stifle bone) causes the animal no pain, but produces complete inability to move the limb.

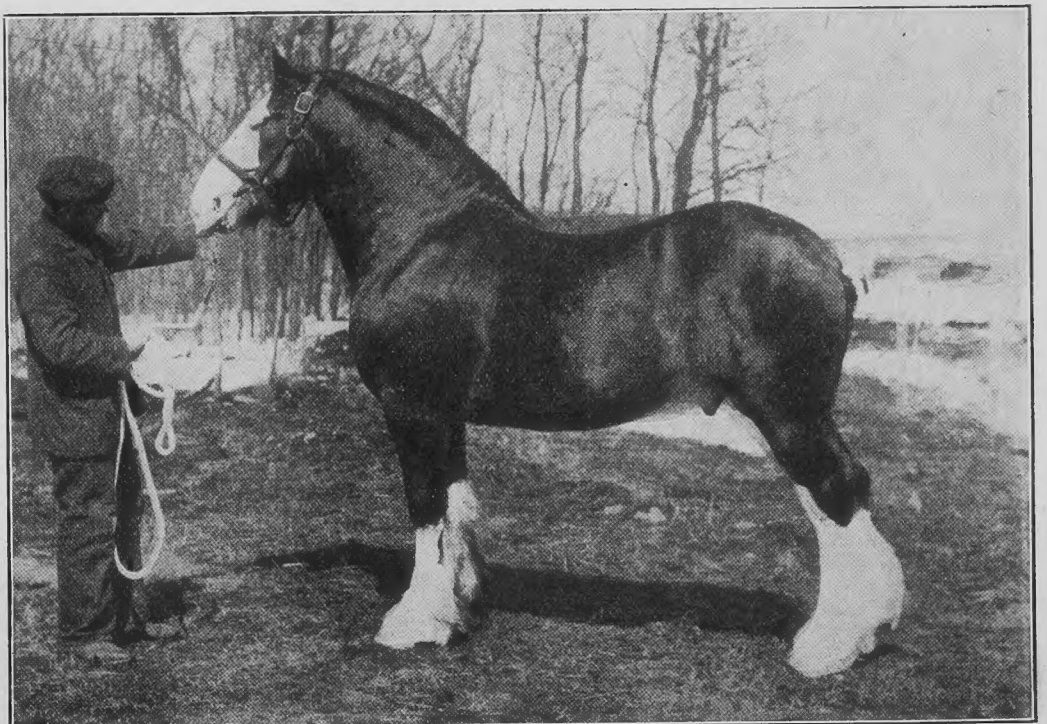
Pain may be generally said to be the common cause of lameness. The patient feels the pain either when he moves the limb or when he bears weight or presses upon it. During motion the patient endeavors to avoid throwing weight upon the lame limb by treading lightly or stepping short, and by removing weight as far from the seat of pain as he can, not only by using the lame limb in a manner best calculated for this purpose—as by treading on the heels when the pain is in the toe, and upon the toes when in the heels—but also by throwing as little weight as possible on the lame limb.

Weakness of the limbs, either congenital or acquired, may cause lameness and inability to perform the functions of progression properly. For example, want of development of muscular fibre in the extensor muscles of the forearm, sometimes seen in foals, causes the animal to stand and walk upon the front part of the fetlock joint, the heel of the foot and the fetlock pad being in close contact: due to the flexor muscles being well developed and having little antagonistic power opposed to them, the fetlock joint is flexed and the animal able to move only with great difficulty. Again, a horse may be lame from excess of tonicity in the muscles of the limb, accompanied by much pain, as in muscular cramp, which renders him very lame for a time.

For the detection of the lame limb, the following general rules should be observed; when the lame limb comes to the ground during progression, the patient suddenly elevates that side of the body and drops the other side. If the lameness be in the fore limb, the head, as well as the fore part of the body, is raised from the lame and dropped upon the sound limb. This is called "nodding." If the lameness be in a hind limb, the quarter of the lame side will be elevated, and that of the sound side thrown forwards and downwards with a jerking motion, the head being held moderately steady, unless the pain be great, in which case it will be jerked in agony.

The signs indicating the seat of lameness are of two kinds: (1) Those manifested by action, and (2) those discoverable by examination while the animal is at rest. In some cases the latter alone are sufficient to indicate the seat and nature of the disease, but the lameness must be of a severe character, manifested by "pointing," standing with the lame leg flexed or elevated from the ground, with the healthy feet placed as much under the body as possible to bear the weight.

In the majority of cases, however, it is necessary to cause the patient to perform some movement, and experience teaches us that a slow trot on hard ground, with a loose rein, is the best pace. A horse may walk lame, but in most cases the peculiar characteristics of the lameness are best shown at the gait mentioned. There are cases of lameness, however, as in slight splint



BARON KEIR (IMP.)

Winner of First Prize in the Aged Clydesdale Stallion Class at Regina Exhibition.
Owned and exhibited by P. M. Bredt, Golden West Stock Farm, Regina.

lameness, where it is necessary to urge the patient to a sharp trot before any deviation from the normal gait can be noticed.

WHIP.

STOCK

(Contributions invited. Discussions welcomed.)

Breed Registration.

The following article, taken from a recent issue of the London *Live Stock Journal*, will be of interest to breeders in Canada at the present juncture:

Nowadays, when every recognized breed of horses, cattle, sheep, pigs in the United Kingdom possesses its stud, herd or flock book, and when the offshoots of these, in many cases, in foreign countries exceed in size the parent volumes, it is difficult to realize that at one time no such records existed. One might almost speak of the romance of breed registration, for the difficulties that were encountered and surmounted by the early promoters were numerous and formidable. It was many years after the General Studbook was originally issued, in 1793, before it had any companions or imitators, and the recent multiplication of breed registers, which have increased within the last few years with astonishing rapidity, makes it almost impossible to appreciate the trouble that beset the pioneers of the work.

There was, at the outset, no general recognition of the need of pedigree records, or any idea, except on the part of a few, that they would serve a useful purpose. Some of the great breeders of early times were resolutely opposed to the publication of the pedigrees of their stock, because they considered that the particulars required were of the nature of trade secrets that ought not to be divulged. Most people will remember the indignant reply of a very eminent breeder when he was asked for the pedigree of an animal he had sold: "Tell him that he was bred by So-and-So; that is pedigree enough for anybody." In the absence of hearty co-operation, it is wonderful that the work proceeded at all. In a number of cases the withholding of information by some prominent breeders undoubtedly caused the initial volumes to be less complete and accurate than they might otherwise have been.

In several instances the idea of having a breed record occurred to one individual, who set about collecting materials, and then, when the stage of publication had been reached, the difficulty of cost arose, and time after time the work was rescued from its difficulties by the munificence and public spirit of some enthusiasts gifted with the means as well as the will. How much is due both to the individuals who started and pushed the project, and to those who did not hesitate to risk loss by financing the undertaking, it would be difficult to calculate. They certainly deserve far more credit for what they did than they have ever yet received.

It is interesting to speculate as to the inspiring motives of those who first originated the idea of breed registers. Probably the enterprise was not begun with a single object, but with several. There is no doubt as to one purpose which was entertained by the first editor and compiler of the oldest Studbook in existence—that for Thoroughbred horses, and still entitled "The General Studbook." The author expressly stated in the preface (which, however, did not appear in the first edition, published in 1793, or in the second, published in 1803, but only in that of 1808) that, "with a view to correct the then increasing evil of false and inaccurate pedigrees, he was, in the year 1791, prevailed upon to publish 'An Introduction to the General Studbook.'" That was clearly his object in the collection of the pedigrees, and it is an object which is served by this and all subsequent registers. But the author of the General Studbook further claimed that his volume "contained, in the most concise and most approved form, a greater mass of authentic information respecting the pedigrees of horses than had ever before been collected together." That, it is believed, more accurately expresses the aim of most of the compilers; the wish was to give correct information. The art of breeding was no longer to be one of mystery, but was to be carried out in the full light of day, with all available information accurately printed for the use of

breeders and others alike. Moreover, the publication of pedigrees enabled breeders to know what was being done outside their own herds, studs or flocks. The pedigrees showed clearly how, by the use of certain ingredients, a high-class animal had been produced, and their intelligent study is one of the sources of the breeder's power. It was seen that the use of such a sire or dam, the union of certain strains, produced certain results, and what has once been done could be repeated on the same lines. The breed registers thus became of the greatest and most practical assistance in carrying on operations upon intelligible principles.

Of course, too, careful registration tended to the preservation of the purity of breeds and to the exclusion of alien strains. Probably this is the most valuable influence of all, and has done much to maintain distinctive breeds, and to enforce improvements within the lines of the breed, instead of relying more upon the introduction of outside blood. Although the records of human genealogy, in the form of peerages and lists of titled personages, doubtless supplied a hint in the institution of live-stock registers, yet it cannot be said that much has been done in this direction. Every animal, indeed, if it be of ascertained pure blood, can secure admission to the breed register, and no cognizance is taken of individual merit. There has been some attempt in America to form an advanced register, based upon merit of performance, but, as a rule, the test is one of blood alone, and not of excellence as well.

It is only natural that the plan of published pedigrees of live stock should have originated in this old-settled country, rather than in those of more recent growth. Curiously enough, however, the newer countries have seized upon the idea and pushed it further than its originators would have dreamt of. Some of these developments are perhaps scarcely advisable, and the building up of registry walls against imported stock in some cases may suggest other views as well as zeal for the purity of the race. One would think, indeed, that the qualification of an animal for entry in a register that is regarded as sufficient in the home of the breed, might reasonably be considered adequate in the land of its adoption. However, that is a matter of domestic arrangement, on which the opinions of outsiders may not, perhaps, be required.

The expansion of some of the breed registers is wonderful. This is seen in the decision of the Shorthorn Society to revert to an earlier plan of issuing the volumes giving the pedigrees of bulls separately from those recording the entries of the cows. Other recent developments have suggested these observations. As would have been noticed from the report of the excellent paper contributed by Mr. Herbert Gibson, of Buenos Ayres, to the International Conference of Sheep-breeders, at Lincoln, he threw out the suggestion that in sheep registration the time had arrived for individualizing the dams as well as the sires of the animals registered. He remarked that the importance of individualizing the dam was beyond debate. "She is the mother of the one, the sire the father of many. To suggest that registration of the sire alone is sufficient individualization of the offspring is to admit a minimum of 50-per-cent. ignorance of origin. There is no technical difficulty in keeping an individual record of dams. The genuine shepherd keeps one in his head. But for the effects of registration—above all, for the

effects of the private registration of a flock, which is the true craft of the breeder—systems, such as ear notches, of numerical value, paint brands, or even collars with numbered tags, present themselves, and are already in use in many parts of the world." It must be said, however, that, whether practicable or not, the individual registration of ewes in large flocks would entail a great amount of labor, and with a flock registered, and all its proceedings open to the public gaze, there does not seem to be sufficient cause for adding so much to the work of the breeder. In Canada, a new regulation as to the registration of a leading breed of imported horses may cause considerable inconvenience, requiring the registration at the time of export of every animal purchased.

These facts show that the custodians of breed registers in this country have not only to conduct them on lines approved by themselves, but that distant countries may put forward schemes that cannot be dismissed without careful study and that may, if adopted, lead to further elaboration of the system of breed registration. These are among the accompaniments of celebrity, and from this point of view the various suggestions may be welcomed.

Lard and Pine Tar For Flies,

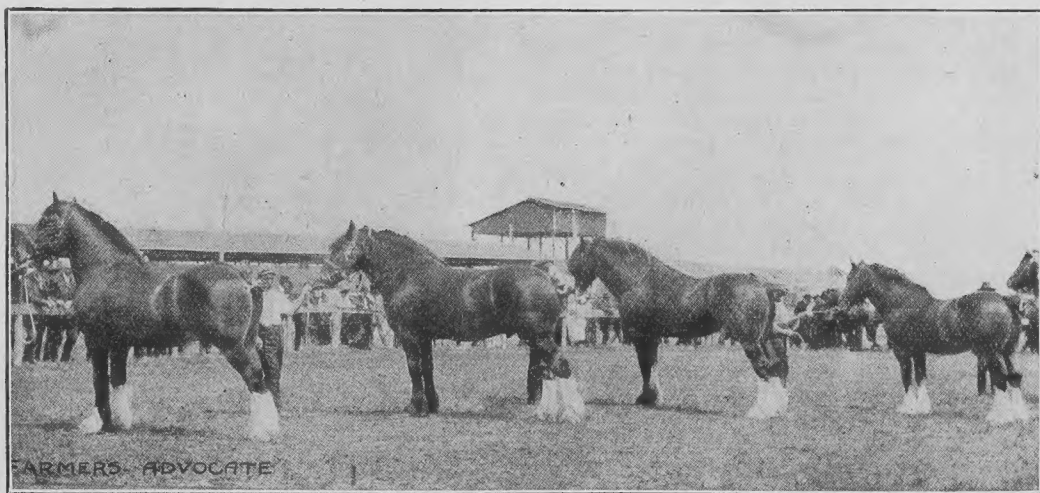
EDITOR FARMER'S ADVOCATE:

In reply to your correspondent, who writes regarding flies, would say that we have tried practically everything that has been thought of here or that has been recommended elsewhere, and have come to the conclusion that the best, all things considered, is a mixture of ten parts lard and one of pine tar, stirred thoroughly together, and applied with a brush or a bit of cloth to the parts most attacked by the flies. Application has to be made about twice a week. It takes a little time, but not so much time as other applications, for the reason that nearly all other applications have to be made once or twice a day. Some applications, such as fish oil, last quite as long, but are so malodorous as to be quite impossible in a dairy stable. Others, such as kerosene emulsion, require so much preparation and such care in the preparation as to make their use more expensive than the mixture of lard and pine tar, although the materials of which they are prepared are somewhat cheaper. The preparations on the market are usually of such a character as to require very frequent application, and they are also generally speaking very expensive.

Your correspondent is perfectly right when he says that a farmer is likely to lose about \$5 per cow from flies in the season. He is, however, I think, hoping for too much when he expects to be freed from the pest with little or no effort on his part. Every possible remedy known has been tried, but the very nature of the pest is such that it is not likely that it will ever be found possible to get rid of these flies or to combat them, save at considerable cost of time and money.

J. H. GRISDALE,
Agriculturist.

Central Experimental Farm, Ottawa.



AGED CLYDESDALE STALLIONS AT BRANDON EXHIBITION.
Concord, Scottish Fancy, Gartahole, Sturdy Royal.

In the Trade.

The prospects are for higher prices for both beef cattle and hogs. Chicago reports say exporters are tumbling over themselves to get cattle and that the buyers consider Alberta grass steers worth 6 cents per pound fed and watered in Chicago. Alberta ranchers offer the inducement of 2½ to 3 cents competition, which the Americans do not appear to be afraid of in spite of the almost prohibitory duty and long freight haul. That Canadian cattle should move across the line to a 6 cent market in Chicago when such a thing is rarely thought of in Winnipeg even with weighing off cars, is not surprising, and the prospects of losing some of the best cattle, for it will be the best that will go across, will probably have the desired effect upon our buyers here.

The hog trade is even more promising than the staunchest advocates of swine raising could have hoped to have realized. Cattle are high priced and the unfortunate mortality among spring litters which was discussed in these columns last spring was quite general all over the country and far south. Added to this fact there is the certain prospect that wheat will not be cheap and with the increasing consuming population in Canada hog raising should continue to be a most profitable branch of farming.

The Sheep Trade Looking Up.

We are glad to learn from sheep exhibitors at our recent fairs that there is an increasing demand for their stock. Manitoba farmers also intimate to us that they have concluded that a few sheep on their farms will help to fight weeds, pack the summer-fallows, and return a welcome income when wheat is not moving. The wolf nuisance is not so formidable now as formerly in the older settled parts and fences are becoming more common. All this augurs well for the condition of our farms and the financial condition of our farmers, for in spite of the fact that there are plenty of thoroughly practical, close-estimating men, who can figure that it is an expense to raise sheep and other stock for the meat market, the opposite is true; namely, that there are men who are making good returns from their stock right along. With feeding stock it seems that a lot of the feed and labor expended upon them and counted as part of the cost of production is really nothing more than a good investment and proves a modern adaptation of the affirmative side of the old saw "eating your cake and having it."

This awakening demand for sheep is felt all over America and as is usual the Americans are most anxious about it. For the first time in history sheep are higher west of the Mississippi valley than they are east of it. In the West the severe winter, the demand on the Pacific coast, the good markets for mutton and wool the past two years and the consequent close selling of lambs, the general desire to feed, etc., all give impetus to a trade that is proving quite profitable. Canadian farmers can well afford to investigate the sheep raising industry. Just recently an Alberta sheep raiser informed us that his flock made him over 80 per cent. upon his investment the first year and most of them were young, and since then the per cent. profit upon his capital and labor expended has not fallen below 100 per cent. The industry is inviting enough for a man with the grasping nature of a Rockefeller.

FARM

(Comments upon farming operations invited.)

Winnipeg "Industrial" Exhibition.

EDITOR FARMER'S ADVOCATE:

In concluding your remarks upon the present-day fairs, you say, "Let us not forget that live stock and the products of the soil are the significant features in these institutions." What about the machinery which enables the tiller of the soil or the stock breeder to raise these products? Is it not deserving of more prominence than roc. peep shows?

Directors of fairs and others interested therein would appear to overlook the important part agricultural machinery plays in the production of live stock, grain, cheese, butter, etc., and the expense manufacturers entail by exhibiting at these fairs.

If the public are desirous of cheap and noisy amusement, provided it is of an innocent nature, by all means let them have it, but not to the detriment of industrial exhibits. If the fair is to consist of horse-racing, sports, cheap and vulgar amusements, then why not call it the "Winnipeg Pleasure Exhibition" and drop the present appellation; viz., "The Winnipeg Industrial Exhibition." If, however, the directors desire to continue the combination, surely that which is conducive to the sustenance of man and beast should receive greater publicity than what is merely a luxury, which without the former could not be indulged in! Why should not the machinery for instance, be brought up to the position now occupied by the peep shows, and let the latter be installed out in the wilderness, as many of the machines have been in the past?

Again, why cannot the machinery be classified, and so arranged that visitors interested in that class of exhibit can more readily compare the various makes of the same type of machine and not as now be compelled to wander through several different buildings to find the machine they may wish to inspect. A catalog with the name of the exhibitor, and the number of his stand would also be a great convenience, the expense of which should not be difficult to defray from advertisements appearing therein. Prizes are given for horses, cattle, dairy produce, racing, etc. Why should not some be offered for machinery? Say, for instance, for the best grain cleaning machine, a machine that would assist in eradication of weeds of which there are now numberless acres and yearly increasing, or any other appliance that would tend to reduce the cost, improve the quality and increase the yield from the soil.

We are over and over again, through the medium of the press, reminded of the educational value these institutions possess for the public. Surely it cannot be considered necessary to educate the rising generation in the art of vulgarity, profanity or gambling! Rather a prize should be offered for the best implement that would destroy the art.

AGRICULTURIST.

Special Work with Oats and Wheat.

EDITOR FARMER'S ADVOCATE:

With this a-e a few figures, showing the results of our work during the last four years, in the selection of seed, under the regulations of the Canadian Seed Growers' Association, of which we are members. These regulations call for the growing of a plot of at least one-quarter acre each year, on specially prepared land, of seed selected by hand from a similar plot the year before. The produce of this plot, after enough large heads from the largest and best developed plants are selected to sow the plot in the following year, is sown on what is called the "Improved Seed Plot," producing general crop seed. When this system has been carried on for three successive seasons the seed from these plots is entitled to be registered in the records of the Association as "Purebred Registered Seed." The accompanying figures show an increased yield per acre, which, while it may not be entirely the result of this system, goes to prove the benefits to be derived from some such system as this.

There has been an increase in the yield of oats from 27.5 bushels per acre in 1903, to 74 bushels in 1906. This is for the improved seed. In the general crop seed there is a gain of the difference between 49.67 bushels in 1905 and 77.4 bushels in 1906, although there was very little difference in the ordinary crops in these two seasons, and conditions were much the same. There has also been a great increase in the strength and vigor of the growing crop, the blades being of great breadth, very dark in color, and the straw being tall and standing up well.

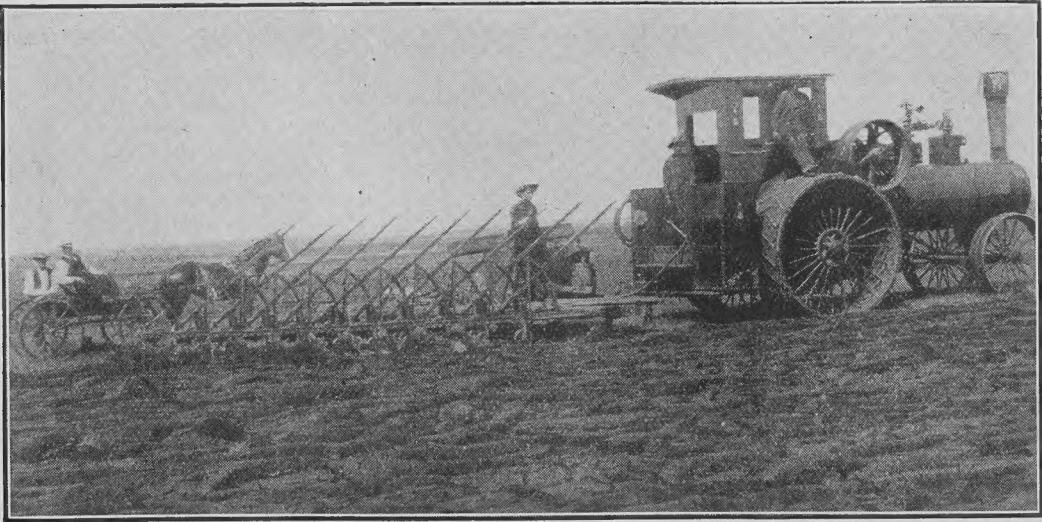
Our land, being a sandy loam, is well adapted for the growing of seed, and we are able to sow less seed per acre, without danger of damage by frost, in order to give the individual plants plenty of room for development. This is one of the main things to be considered in this system of seed selection. We sow about one bushel of wheat and two of oats per acre, and on the hand selected seed plots, we stop up every third spout of the drill, so as to have plenty of room for the work of selection, as well as for the better development of the plants.

We have done much of our work so far with oats, but are taking up the selection of wheat as well, and expect to have as good results as from the oats. The great difficulty will be to keep this seed absolutely free from the seeds of noxious weeds, which up till now we have not been greatly troubled with.

While we are having good results in increased yields and vigorous seed, there is of course more work and expense, in connection with this than with ordinary crops, but so far we have been able to dispose of all the seed we have had to spare, at prices which more than make up the difference. As the regulations demand that it shall be grown on specially prepared land the quantity which can be raised will always be limited, to a certain extent.

We have every prospect of a continuance of these results for this year, our crop being in fine condition, although later than usual, in common with the others in this district.

OATS, IMPORTED REGISTERED SEED.						Gen. character of harvest in this dist.
Year.	Variety.	Acres.	Average Yield.	Quality.	Kind of soil.	
1903	Banner	1	27.5 bu.	First class	Light sandy loam	Fair
1904	do.	do.	*24.7 bu.	do.	do.	do.
1905	do.	do.	53.4 bu.	do.	do.	Good
1906	do.	do.	74 bu.	do.	do.	Very good
*Partly destroyed.						
OATS, GENERAL CROP REGISTERED SEED.						Gen. character of harvest in this dist.
Year.	Variety.	Acres.	Average Yield.	Quality.	Kind of soil.	
1905	Banner	3	49.67 bu.	First class	Light sandy loam	Good
1906	do.	5	77.4 bu.	do.	do.	Very good
WHEAT, RED FYFE.						
Year.	Variety.	Acres.	Average Yield.	Quality.	Kind of soil.	Gen. character of harvest in this dist.
1905	Red Fyfe	1	22.2 bu.	First class	Light sandy loam	Good
1906	do.	1	35.25 bu.	do.	do.	Very good



C. W. THURN'S STEAM PLOWING OUTFIT, BREAKING PRAIRIE WITH A COCKSHUTT POWER-GANG AT HIGH RIVER, ALTA.

Gilbert Plains, Man.

Dow Bros.

Steam v. Animal Power Plowing.

EDITOR FARMER'S ADVOCATE:

Recently I had occasion to run down the country for a few days and during my trip called in at Dakotah, 25 miles southwest of Winnipeg, where I spent a day on the farm of Mr. C. Winslow, who has lately become possessed of one of the most modern steam plowing outfits in the West.

The machinery consists of a 32-horse, simple, Case engine, a 10-furrow Cockshutt plow, two steel tanks and a couple of wagons, the engine and plow being identically the same as that shown in the illustration on the preceding page.

I found the outfit at work on a piece of very rough and soddy ground, covered with a variety of weeds, the land having recently been flooded from the Assiniboine. The engine was travelling along at about two miles per hour, pulling the 10 stubble bottom with the greatest of ease. The crew consisted of an engineer, fireman, plowman and two teamsters.

The outfit had just come up off another section, where it had plowed some 240 acres of heavy stubble ground, which would have necessitated eight mules to the gang. During the working of this piece of ground Mr. Winslow took particular notice as to the amount of coal burnt and the acreage per day, and found with 2,100 pounds of coal about twenty-five acres could be turned over in ten hours, which is equivalent to eighteen miles of land plowed at a speed of 1.80 miles per hour. Allowing for turning at the headlands and an occasional stoppage for cleaning the fire and coaling, the speed of the engine must have been about two miles per hour. The water was taken in whilst the engine was travelling.

Owing to rain we were compelled to retire to the house, where we spent some time roughing out an approximate cost for plowing an acre of the stubble land mentioned.

The total value of the machinery in use was taken at \$4,500, made up as follows: engine \$3,500, plow \$700, two steel tanks \$120 and a couple of wagons \$130.

Now to apportion the interest and depreciation per working day, it was necessary to decide on the number of days per annum that the outfit would be at work. This, to be on the safe side, we took at seventy days, although doubtless the machinery will be working for a more extended period of the year.

The rate of interest was taken at 8% and depreciation at 15%. The wear and tear of course could only be arrived at after the conclusion of the working season, but for the purpose of our calculation we decided to allot for this \$5.00 per day.

General expenses were taken at \$2.00, these to include management, boiler inspection, insurance, etc., etc.

From the foregoing we compiled the cost of plowing twenty-five acres as follows:

Engine	\$ 3.00
Fireman	1.50
Plowman	1.50
Two teamsters and teams @ \$3.00.....	6.00
Board of five men @ .50.....	2.50
Feed of Teams @ .50.....	1.00
2,100 lbs. of coal at \$7.00 per ton	7.35
Oil, etc.	.50
Interest on \$4,500 for 70 days at 8%	5.14
Depreciation on \$4,500 for 70 days at 15% ..	9.65
Wear and tear	5.00
General Expenses	2.00

\$45.14

From this it will be seen that the cost of plowing an acre is \$1.81, say \$1.85. I may here mention that before purchasing the steam outfit, Mr. Winslow had agreed to pay \$3.00 per acre to have this land plowed, as he was somewhat in arrears with his work—so that on this 240 acres alone he made a saving of something like \$276.00.

I have said before that to plow this same land with mules, eight would be required for each gang, which in ten hours would plow on the average four and one-half acres. So that to do the twenty-five acres per day either six gangs would be required or five gangs for one day and one for half a day.

Let us see what capital five complete outfits would represent. The cost of a good mule, duty paid, from the States, is to-day in the neighborhood of \$300. Let us, however, take the value at \$250. The five outfits would then come out as follows:

40 mules at \$250	\$10,000.00
40 sets of harness at \$17.00.....	680.00
5 gang plows at \$75.00.....	375.00

Total

Now to apportion the interest and depreciation chargeable per day would be somewhat difficult owing to the mules and harness being used many more days in the year and for many other purposes than that of plowing. Let us, however, try to arrive at a cost of plowing the twenty-five acres by taking the rate for a team and teamster at the same figure as for those employed in conjunction with the steam plow, viz., \$3.00 per day, plus 50 cents for board of man and fifty cents for feed of team. For the extra teams to each gang let us allow \$1.50 and fifty cents for feed per team. To this something must be added for use of plows and management. Let it be assumed that \$2.00 per day would cover this. We should then get the following cost:

5 teamsters at \$1.50	\$ 7.50
20 teams at \$1.50	30.00
Board of five teamsters at .50	2.50
Feed of 20 teams at .50.....	10.00
General Expenses	2.00

\$52.00

This is the total for 22.5 acres, so to complete the 25 we must add one tenth, making the total \$57.20, or \$2.28 per acre—say \$2.30—thus shewing a margin of 45 cents per acre in favor of steam.

Mr. Winslow has now 32 mules, 4 horses and a small traction engine which he uses for grinding feed, threshing, etc., and I supposed having purchased the new steam plowing outfit that he would be reducing his working staff of animals. "No," said he, "You see with my present force and by using steam for the heavy work of plowing I can crop another 600 acres of land; further, with the short working seasons we are having, it is important to get the plowing all done in the fall, and this I can do by commencing to break up the stubbles as soon as the crop is cut.

Now there is nothing to prevent the steam plowing outfit from running 12, 14, 18, or even 20 hours per day; it simply means having a change of men and two extra teams, whereas in the case of animal plowing not only would extra teamsters be required, but a duplicate complement of 20 teams would be necessary to accomplish the same amount of work in a like number of hours; also greater stabling accommodation would be required. Besides, no farmer would wish to keep such a large number of animals during the winter eating their heads off. The steam outfit eats only when working.

Then again, not only will the land be in better condition from being exposed to the atmosphere for a longer period and much more easily worked in the spring, but by the use of steam a deeper and better cultivation can be obtained. Deeper plowing in the case of the mules would either mean a reduction in the acreage per day or an increase of animal force.

Like many other farmers, Mr. Winslow would welcome the advent of the light agricultural motor on the farm so as to reduce the number of his working staff of animals.

A. BURNES GREIG.

Treatment for the Cabbage Worm.

The cabbage worm seems this season to be doing considerable damage to the cabbage crop. It may not be any more prevalent this year than others, but at the same time it is making no little trouble to those who grow cabbages, and unless its ravages are checked it is likely to cause no small pecuniary loss. There are various remedies advised to destroy this pest, but the active principle of them all is the same; that is, poisoning by some insecticide, of which Paris Green is the most common example. A great many other remedies have been recommended, and some of them are undoubtedly useful, but nothing is so satisfactory and cheap as the Paris Green, and without gross carelessness there is not the slightest danger in the application. We have seen all kinds of remedies used, applications of salt and water, water at a temperature of about 150 degrees, and hand picking of the caterpillars. The last of these is quite an undertaking if more than a head or two are grown, the first and second of doubtful efficiency; in fact, brine can have no insecticidal effect, and water hot enough to destroy the worms might come dangerously

near injuring the plants. A good many people though do not care about applying an active poison to a cabbage head, since it is that portion of the plant to which the poison is applied which is used for food. There is little danger, however, of being poisoned from eating cabbage treated with Paris Green. In fact, where the crop is grown commercially this remedy is always used, and we have yet to hear of anyone being injured by eating the cabbage.

The cabbage heads form from within—that is to say, the leaves unfold from the center of the head and do not fold together to form it; therefore, whatever poison is put upon the plant can fall only upon the outer leaves, and not a particle gets into the head itself. The amount used to a single cabbage plant is so minute that in order really to poison a man it would be necessary for him to eat about a dozen heads at once, outer leaves and all, and if death then resulted it could be more properly attributed to the cabbage itself than to the Paris Green. In cooking cabbage the outer leaves are generally torn off, the head itself cut up, washed and boiled. Chemical analysis has shown that on a head so prepared, within a week after a heavy application of Paris Green, not a trace of poison remains. Paris Green for this purpose should be mixed in proportion of about one pound in 125 gallons of water; add a little hard or soft soap to prevent the liquid rolling off the leaves. Another remedy sometimes used is hellebore dusted over the cabbage leaves early in the morning. Hellebore is poisonous to insects, although harmless to man. It is more expensive than Paris Green.

Steam Plows and Moisture Conserving.

EDITOR FARMER'S ADVOCATE:

Your correspondent in Aug. 7th issue, under this caption, undertakes to persuade us that the only hope for agriculture on these plains for the future, is the wholesale adoption by farmers everywhere of motor-driven cultivating, seeding, moisture-saving machinery. He very properly in the first paragraph of his remarks divides science into two parts, theoretic and practical, but unfortunately this gentleman does not proceed very far with a practical discussion of the subject. He drifts over at once to the easier, the purely theoretical side of the case. In this sense he discusses the whole thing fairly well, certainly from the facts as he states them his conclusions are logically drawn. He evidently bases his whole theory upon some little experimental work which Prof. Campbell has been doing down in the bad lands of the south, and upon a remark once made by a young girl who afterwards became the wife of the Earl of Leicester. If these, Mr. Editor, are sufficient to afford your correspondent a foundation for those theoretical absurdities which he is apparently endeavoring to promulgate among the agriculturists of this country, the renouncement of such nonsense is sufficient reason for us devoting a paragraph or two to the subject in reply.

We believe, as Mr. Greig does, that as the science of agriculture advances a good many of the practices now in vogue will be dropped. We believe too that farming methods will change; that within the next twenty years advancement quite as marked as that which characterized the past two decades will be made; that the horse is going to be superseded by something else as the motive power on the farm just as surely as labor-saving machinery has reduced the work of men. But at the same time the principles of the art of agriculture itself cannot and will not change. There is nothing new in Prof. Campbell's moisture conserving scheme. It's simply the practical application of what to physical scientists has long been a recognized fact. The new part comes in where your correspondent drifts away from the beaten paths of sound experience, gives free range to that otherwise unsuspected poetic temperament of his, lulls us onward with him to the realms of speculation, where his imaginative mind makes phase and form from things unknown, "and gives to airy nothing a local habitation and a name."

True it is that necessity is compelling the farmer to direct his attention to the study of science, and the problem of soil moisture is one of the most important that he is now facing. I strongly suspect, however, that the solution of this problem is to be found in quite a different direction to that in which your correspondent seeks to persuade us it exists. Frankly, we place small credence in Mr. Greig's nicely arranged little scheme for tearing up the soil to a

depth of a foot or fourteen inches, under the hallucination that he is increasing that soil's capacity to hold water "like a sponge." Agricultural science had begun to work out this moisture conserving problem, along other lines, years before this gentleman and others who are now advocating these same theories with him, were born, and it is along these other lines that the true solution of the whole problem has already been, or in future is going to be found. What is required in the average soil that suffers from moisture scarcity is greater water holding material. Given that and the problem ceases to exist. For example, you could cultivate a pure sand with all the motor or horse driven machinery that was ever devised, you might open it as deeply as you liked, but you couldn't increase that soil's capacity to retain moisture by the smallest fraction of a per cent. But incorporate into that sand some organic material, plow down a crop or apply some barn-yard manure, and the previously barren sand becomes productive; it begins to retain the moisture which it receives. It is the same with these soils to which your correspondent has reference. Understand, I don't mean to say that cultivation has nothing to do with moisture conservation; we know that it plays an important part. That I do mean to say is, that however important cultivation may be in this respect, it is in rational cultural methods in conjunction with the proper cropping of the land that the true and only solution of the moisture problem is to be found, and with all deference would submit that such methods of cultivation as were outlined in your journal on Aug. 7th, are neither rational nor correct. The advocates of such absurdities as these are in a class with the hair-brained American scientist who rushed into print a few years ago with the results of an experiment or two which he had conducted which seemed to show that the mechanical condition of a soil at seeding and during the growing season, had all and the plant food in that soil nothing to do with the production of the crop. Ordinarily, nonsense such as this is simply ignored, but when a writer who displays as much intelligence and as good a grounding in his subject as Mr. Greig displays, comes with such clearcut statements as these, the occasion calls for some passing glance in reply.

It is well to remember in approaching this subject, that there are three distinct ways in which water is held in the soil. There is the free water of percolation, the kind your correspondent is evidently thinking about all through his remarks; there is the capillary water, the water that is lifted up from the lower depths by the surface tension of the soil grains, and there is the third form which may be disregarded in this instance, the form known as hygroscopic moisture. It is with the capillary water in the soil that we are most concerned. Any ordinary plant can flourish with the free water table several feet below the surface; in fact, more of the agricultural plants could grow if their roots were bathed in this upper twelve inches of soil full of water "like a sponge." What is required in

managing a soil to increase its water retaining capacity, is to get the lower subsoil opened up by some means; get it so that water may freely percolate down into it, not for eight or ten inches, but to as many feet. To accomplish this only natural forces can be employed. In truth the thing could be accomplished by no other means. No motor or horse driven subsoiler yet invented can do it. It can be done by one thing only and that thing is the clover plant: the roots of this crop are voracious subsoilers; they penetrate, some varieties at least, to depths of from one to twenty feet. Their roots when they decay form channels down which water is readily conveyed to the lower depths. They make the lower soil more pervious, they increase its capillary power, and they are as well a fertilizer of no small import. There is no soil that I know of in these Western provinces that could not be penetrated by clover roots. I have seen it growing a few inches above, and sending its long roots down into the genuine hard pan, not just the common clay subsoil we have in most places here. If a subsoil is too hard for clover to send its roots into, it cannot be cultivated by any kind of cultivating machinery yet seen in America. It may be urged that clover cannot be grown very successfully in this province, that it is still an experiment. We have grown clover on our own farm here in Southern Alberta for the past five years on soils similar to those your correspondent talks about, and we have yet to see it fail.

Then in respect to climate, I confess I do not quite understand Mr. Greig's statement in this respect. Perhaps it would be well to permit him to qualify it a little, for any man who has ever thought about the matter at all, knows that the cultivation of the soil, no matter how it is done, how deeply or how shallow, can have no appreciable effect on climate. The climate of this country is dependent on no such factor as this for its existence. The soils of this country have now been cultivated for years, and the records of the Dominion meteorological service, for the same field, extending as they do in one instance at least, over a quarter of a century, show that in so far as climate is concerned the breaking up of these virgin prairies and their subsequent cultivation has had no visible effect on either temperature or precipitation. How then can this new scheme affect any modification?

And lastly I would like to touch upon Mr. Greig's theory of weed eradication. For the worst weeds that we have in this country to-day, such an eradicating scheme as this would only be a means of aiding the pests to flourish with greater luxuriance, would only be a method of getting them more firmly and a good many of them more deeply established in our soils. We have found in our own practice that shallow cultivation is the most effective way of getting rid of weeds, that tearing the soil up good and deep only gave the pests a chance to get a firmer hold, and I believe this has been the experience of practical farmers everywhere. I would just like to take this one point up with your correspondent, Mr. Editor, and argue his theoretical pro-

positions, with sound practical contentions, but I feel that to do so at this time would be imposing too much upon your space. I have set forth our views of the question as clearly as I can, and trust to see the ideas of other practical men published.

Alta.

H. OSCAR SHELDON.

Horticulture and Forestry

Strawberry Growing in Northern Manitoba.

EDITOR FARMER'S ADVOCATE:

Before coming to Northern Manitoba I was engaged in the fruit growing business in Missouri for over 30 years, and immediately upon taking up my residence in the Swan River Valley I began the growing of strawberries. The success we have had here in this time convinces me that the climate here is just as good as it is in any place in the States for this crop, provided the following conditions are complied with:

The land should not be too light and sandy, that it will dry out too much in winter and result in winter killing. Plants will survive through our coldest winter, provided the land is sufficiently heavy to hold moisture. A friable clay loam that will produce about 35 bushels of wheat per acre is the best for strawberry growing. The plants should be set out in a sheltered place where they will be protected against high winds and where the snow will lie on them over winter. In the fall cover them with a mulch of straw or hay before the snow falls and leave it on until the beginning of May or until the growth has well started, the idea being to retard growth so as to avoid the danger of June frosts to the blossoms.

The varieties I have found most adapted to the climate of Northern Manitoba are "Warfield" and "Senator Dunlap" and I have tried out large numbers only to discard them. With these varieties you need to plant alternate rows and there will be no danger but what they will fruit well. Prepare the land in the fall by plowing and harrowing four or five times and set out the plants in the spring and if possible set home-grown plants. Set the rows about 4 feet apart and the plants about 3 feet apart in the row. Keep the weeds down and allow the runners to take root, which they will do if there is plenty of rain, but if the rainfall is light some of the runners will have to be set down by hand.

I might say that ill health compels me to remove from the Swan River Valley to a different climate, and I would thank you to inform your readers that I am unable to answer the correspondence upon strawberry subjects which has accumulated at my table.

Woody River, Man.

J. H. MONSEES.



CATTLE AT HAWTHORN BANK STOCK FARM.
The Property of John Graham, Carberry, Man.

DAIRY

Records a Business Necessity.

EDITOR FARMER'S ADVOCATE:

We started testing our cows on the first of July, 1902, and have continued ever since, and intend to do so as long as we need to make money from our dairy. Prof. Grisdale of Ottawa induced us to begin, and still furnishes us with blank record sheets, etc. The time it takes per day is hardly worth mentioning. We have the scales and the record sheet close by the milk shelf, and I don't think it takes three minutes a day extra time. Of course, the records have to be added up afterwards, but that is done at night. We test every two months, finding that cows kindly treated don't vary much in butter-fat. Some of the advantages of keeping a record are: First, the feeding of cows. When a cow calves, of course, she must be fed light for a few days; then, by watching the record sheet, the feeder can tell when he has reached the point of profitable "stuffing." He can tell if the cow is beginning to shrink, and investigate the reason. He can tell if it is time to change the pasture better than by looking at the field. He soon finds out, as we did last winter, how much better ensilage is than roots. Second, bettering the herd by selection. We have only six of our original cows left now. The rest have been weeded out and replaced by heifers raised from the best cows, bred of course, to a good Jersey bull. Third, we find that people will buy cows much more readily when they can be shown their past record.

Now for figures. You will find below how our herd has increased from month to month and year to year, and remember that the figures for 1906 are from seven two-year-olds, six three-year-olds, and six old cows:

	1902.	1903.	1904.	1905.	1906.
January.....	64	81	120	141	213
February.....	101	141	190	197	274
March.....	163	249	280	292	368
April.....	256	297	343	383	392
May.....	367	430	445	520	605
June.....	318	424	412	450	641
July.....	297	365	373	339	553
August.....	288	312	313	359	487
September.....	224	331	260	330	410
October.....	110	246	231	306	469
November.....	73	144	222	249	349
December.....	59	92	135	236	313

R. M. HALLIDAY.

Herdsmen for J. A. Halliday.

Vancouver, B. C.

Improving the Quality of Milk and Cream at Creameries.

The author of Bulletin No. 132, New Hampshire Station, makes the following statement regarding American creameries, which statement is probably true, also, of creameries in Canada:

"During the past few years but little improvement has been made in the quality of creamery butter; this, too, in spite of the fact that creamery buttermakers, as a class, have never before been so well informed regarding their work. Never before have they been able to make use of as good machinery and special apparatus, and never before has a fine quality of butter been more largely sought after by the consuming public."

In many instances the quality of creamery butter has become poorer, in spite of the above-mentioned improved conditions. In looking for a reason for this condition of affairs the writer says: "The reason is seemingly found in the gradual change which has taken place in the methods employed by dairy farmers in delivering their product to the creameries. This change has resulted in the acceptance and use by creamerymen of a poorer grade of milk, and, more particularly, a poorer grade of cream for buttermaking." It sometimes happens that separators are used several times without being properly cleaned, and in some instances they are placed and used in some convenient but dark and dirty corner of the barn. Cream separated under the above-mentioned conditions is brought into contact with

many undesirable bacteria, and bad flavors are the natural result. It frequently happens that cream is not cooled to a low temperature and properly cared for after it is separated on the farm, and often is it of uncertain age when delivered at the creamery.

In order to improve the quality of the cream delivered at the New Hampshire College creamery, the milk and cream is graded and paid for according to grade and quality. The system has been in operation since July 1st, 1906. The scale of points used for grading is as follows: Flavor, 50; acidity, 25; condition, 25; total, 100. During the time this method has been on trial the quality of milk and cream received has been slowly but constantly improving.

In order to induce patrons to improve the quality of the raw material furnished, a scale of prices has been adopted. One cent extra per pound has been paid patrons for butter-fat in milk or cream scoring 95 points or over. The usual price has been paid patrons for butter-fat in milk or cream scoring 90 and under 95 points. One cent less than the usual price per pound has been paid patrons for butter-fat in milk or cream scoring 85 and under 90 points. Two cents less than the usual price per pound has been paid patrons for butter-fat in milk or cream scoring 80 and under 85. Three cents less than the usual price has been paid for milk and cream scoring 75 and under 80 points. Patrons furnishing milk or cream scoring under 75 points have at once been notified that they must improve the product or it would no longer be accepted at the creamery.

The foregoing will serve as a guide to those who are struggling with the problem of trying to improve the quality of the raw material delivered at our creameries and cheeseries. We have been working at this question for years, but up to the present have found no satisfactory solution. In our last monthly letter to patrons we said, "It is taught that men and women shall be rewarded or punished finally according to the deeds done in the body," but in this life there are many ways of avoiding or getting around pains and punishments. It is practically impossible to frame any set of rules which will suit all cases. Someone has said that men and women are but grown-up children. We all know that children dread punishment and love rewards. We have, therefore, to work on the reward plan more, and less on punishments, when dealing with a free and independent people, such as are Canadians. We are following the reward plan of offering one cent a pound fat premium for sweet cream testing 25 per cent. fat or over, and delivered not less than three times a week in hot weather. The results will be made known later. H. H. D.

Prize Butter-making.

Below is a brief article by Mrs. Tomes of Plumas, Man., one of the prize-winners in the butter-making contest at Winnipeg, outlining her system of making dairy butter on the farm.

"In regard to my method of making butter I might say that I used the same method in the butter-making competition as I do in my own home dairy. My plan is about as follows:

"After separating the milk I allow the cream to cool (never mixing it until cool). To ripen it for churning I raise the temperature to 85, keeping at that for about two hours, then cooling down to 60. Before churning I cool down to 54 in summer and 60 in winter. I use a Daisy churn and stop churning as soon as the butter granules are about the size of wheat grains. The butter-milk is drawn off and the butter covered with cold water in which it stands half an hour. When this is drawn off the butter is covered again with water in which half a cup of salt has been dissolved. I let it stand fifteen minutes this time and then drain off as dry as possible. Then I add one ounce of salt to every pound of butter, give the churn a few turns and let it stand again for half an hour; then churn again until the butter is in small lumps. I use a Waters butter worker and put the butter through about five times, but not enough to destroy the grain. I use a separator and from twelve cows churn twice a week. I may say that I find it impossible to make good butter without a thermometer and butter worker. I find difficulty in disposing of my product and all who take the trouble to make good butter can find a ready market in Winnipeg for all they can make at prices that pay well all through the year."

POULTRY

Cranky Hens.

EDITOR FARMER'S ADVOCATE:

Occasionally I have had hens so cranky with their chickens that several chickens would be killed before ready to leave the nest. Recently one hen proved of a very cranky nature and after several chickens were picked and the remainder badly frightened I placed them under her and drew a thin cotton bag over the hen's head and neck. It was amusing to watch her pick in the direction of the chickens, but being unable to aim correctly she concluded to give up the attempt, and next day she did not need the muzzle and since shows quite an angelic or motherly disposition. M. E. G.

Blackhead Discussed by an English Expert.

In view of the undeniable prevalence in America of blackhead, a parasitic liver disease which appears to be particularly common in turkeys, but from which other poultry is not free, the following treatise of it, read by Fred V. Theobald, M. A., Southeastern Agricultural College, Wye, Kent, before the National Poultry Conference at University College, Reading, Eng., will be read with interest by many poultrymen:

"During the past four years, several cases of what has been called 'infectious entero-hepatitis' have been sent to me for examination. This disease does not appear to have been previously recorded in Britain, but is probably quite common. In Continental Europe its serious nature has been recognized, and in America it has been carefully investigated by several observers. The disease is probably very widespread over both European and American continents, but there are no records to show whether it is present elsewhere. It appears that the disease manifests itself, in America in turkeys, and is known popularly by the name of "Blackhead." The cases that have come to my knowledge have, all but two, been in fowls. The cause of the disease is a small protozoan called *Amaeba meleagridis*, of Smith.

"The part that parasitic protozoa play in various diseases of man and animals year by year seems to be more prominently brought to our notice. One has only to refer to the malarial fevers and sleeping sickness of man, the red-water and East Coast fevers of cattle, the tsetse disease of horses, etc., to recognize the vital importance of these minute parasitic animals to the health of ourselves and our stock. With regard to our poultry, we know at present little or nothing regarding their complaints, except in the crudest of ways. Protozoa, however, are known to produce two well-known diseases in them; the first is known as spirillosis, or fowl fever—a very fatal malady in poultry in South America, caused by a small parasite, a spirochaeta. The parasites which cause the entero-hepatitis in poultry are quite different; as far as I can ascertain, they seem to be true amoebae, of round or oval form, somewhat irregular in outline, and with a distinct nucleus. As far back as 1893 and 1894 Smith worked on this subject in America, and Moore in 1895 and 1896; Salmon and Stiles have more recently investigated this subject.

"In this paper I only intend to point out the general appearance and effects of the disease. It is somewhat important to notice this disease, because it has, I find, been more than once taken for tuberculosis, and I should not be at all surprised if many cases of reported tuberculosis of the liver have really been this parasitic hepatitis. Unless carefully prepared and stained sections of the liver are made, it is quite impossible to say what is the cause, unless the other parts of the body are also examined.

"Symptoms and Appearance of Diseased Birds.—It is very difficult to note any very marked symptoms until the disease is in a very advanced stage. Diarrhoea is one of the most constant features, followed by emaciation and general weakness. Now and again there seems to be considerable puffiness of the head and a peculiar discoloration which gave rise in America to the term 'blackhead' in turkeys. This I have seen in fowls, but in two cases, in which the effects of the parasites were most marked internally, there were no signs of facial discoloration; in fact, it is almost impossible to diagnose this disease in the ordinary way. The post-mortem appearances are very marked in both the liver and in the two blind intestinal sacs or caeca. The liver becomes greatly enlarged. In one specimen examined it was quite double the normal size. Over its surface are studded pale spots of a more or less round form, but often irregular in outline. These vary in size from that of a pin's head up to half an inch across; Salmon records them up to two-thirds of an inch in diameter. In color they vary from grey to mottled pale brown, when freshly formed; later they assume a yellow

and cheesy appearance. All stages between may be found, the yellow, cheesy color originating in the middle of the pale spots. These yellow areas represent dead hepatic tissue, which keeps spreading outwards. These areas not only occur on the surface of the liver, but I have also found them deep in the tissue, and later they become readily separated, as hard cores, from the degenerating hepatic tissue surrounding them. If the liver only is examined, and that casually, one may easily be lead to assume that it is invaded by tuberculosis. Nothing but careful, microscopic examination can separate the two diseases, so far as I have observed. But besides, in the liver there are marked lesions in the caeca, by which we can at once tell the cause of death. Externally, the two sacs present a swollen and inflamed appearance; the walls become thickened, and dull grey and yellowish masses of exudate arise on the serous covering. The caeca frequently become united to the intestine by this exudate, and even it is said, to the abdominal walls, but this I have not yet noticed. Internally, the sacs become filled with a yellowish-white mass of cells, with blood corpuscles intermixed, and the inner walls also become spotted with pale areas similar to those seen in the liver, but smaller. This swollen appearance of the caeca is very important to look out for where we find yellow spots on the liver, as it at once gives us a clue to the true cause of the disease.

"The life-cycle of the parasite.—The life cycle of *Amoeba melagridis* does not seem to have been satisfactorily worked out. It certainly multiplies in the caeca, not only in the mucous membrane, but also right in the muscular tissue. Reproduction here seems mainly by fission. The masses of protozoa pass into the lumen of the caeca, and so into the intestine. We find exactly the same process taking place in the liver tissue, where the parasites reproduce rapidly and set up the round areas of the disease referred to, the parasites killing the tissue and spreading outwards into the sound hepatic substance as the central area dies and the parasites increase. These nidi burst, and thus the amoebae pass into the bile tubes, and so regain the intestines.

"How they reach the liver we have no direct evidence, but it is thought by the blood and derived from the caeca. This is probably partly the case, for I have found them in one case studding the spleen. But I am inclined to think that the liver may become infected direct from ingested germs. The disease develops in a very variable manner. It is said from two to six weeks after infection (Salmon) the bird may die. At other times it takes some months to cause any illness, and in some cases birds are said to recover.

"Infection is derived from the parasites passed out into the excrement from both the caeca and liver. These may fall in or come in contact with other birds' food or water, and thus get ingested. The amoebae then enter the liver and caeca, and soon commence to multiply after penetrating the tissue. Similar organisms have been found in the serous fluid in the swollen heads of affected birds.

"Treatment and Prevention.—The treatment of this disease is impossible. In the first place we cannot satisfactorily diagnose the disease. We may, however, suspect its presence in sickly birds in a run, if we find by post-mortem appearances that it is present in one or more fowls. If this is the case it is advisable to clear out their stock and start afresh, in a new run or on new land. Runs which diseased birds have been should be well soaked with carbolic, at the rate of ten quarts of carbolic to 100 parts of water, and then the land should be well dug over. To some extent it may be checked where suspected by giving the birds very little clean water with salicylic acid dissolved in it. As infection may and probably always does take place direct, it is most important that all unhealthy birds be at once isolated, and all excrement carefully removed, and the run well cleared down."

FIELD NOTES

Successful Exhibition at Lethbridge.

Lethbridge Fair was a success, a success for beyond anything previously given in Southern Alberta, a success far beyond the expectations of its most sanguine well-wisher; in every respect the greatest the society has yet held. And the association well merits the patronage which their show receives. They expended this year upwards of three thousand dollars in improving their equipment, in extending their live stock stabling, in fitting their buildings to better accommodate the products of the soil. The entries numbered more than double those of last year; the quality in every line was of the highest order. Two attractions stood out foremost, and made the star features of the fair: heavy horses and field grain. The estimated value of the horses that paraded before the grand stand was at least \$200,000; they were as fine a bunch as could be gathered together at one place in that part of the province. Percherons, Clydesdales and Hackneys from the Bradshaw, Harvey and Ewen studs, vied with each other for the admiration of the crowds. R. W. Bradshaw of Magrath had a string of Percherons out of which it would be small credit to say they were the equal of anything ever shown in Western Canada. A good many of these horses were prizewinners in France before they came out here. Bradshaw got all the money in mares, in young stallions, and won the specials given by the Percheron Society of America. He had among his entries a number of individuals that deserve more than passing mention. The first of these is Fildor, a black, with all the substance, quality and weight he needs, a flat, clean bone, and good action. He was a winner in the three-year-olds. Then there was Malice, the first prize two-year-old, the rival of Harvey's Baron's Sorby for heavy draft sweepstake honors, and Pink II, a four months old foal that weighed 700 pounds. Bradshaw also showed a French coach of special merit, Ataman, first in his class as a yearling at Illinois State Fair, well-bred and splendidly actioned.

The Clydes were a good exhibit. The class for aged stallions brought out ten competitors. Baron's Sorby, owned by W. H. Harvey, got the prize. This is an exceptionally well-bred stallion. He is five years old, sired by that famous Scottish Clydesdale, Baron's Pride, imported to this country by Sorby of Guelph, Ont., brought to Western Canada by Jno. A. Turner of Calgary, from whom he was purchased by Mr. Harvey. He was first in his class; he won the sweepstake prize, competing against all breeds, which in horse company like they had at Lethbridge is no small honor. The other exhibitors of Clydesdales were Messrs. Hanson, Henshaw, Smith, McCaugherty and Harker, who divided the money in the other sections fairly equally. J. B. Ririe, Magrath, had the only entry in Shires. Thoroughbreds, Roadsters, Saddle and Carriage horses made a large class, altogether too large to be taken up in detail here. They were the equal of the heavies in quality and numbers, the competitions in nearly all sections quite as exciting and keen.

Cattle, sheep and swine made a rather light showing in comparison with the horse exhibit. Shorthorns were the only purebred cattle represented. S. H. Fairfield, W. D. Whitney and J. B. Ririe were the exhibitors. Mr. Ririe got most of the prizes on young stock; Whitney was first and second in two-year-old bulls; Fairfield first in aged bulls and sweepstake champion. In sheep, Merinos and Shropshires made the only showing. J. B. Ririe and Passey were the exhibitors and got all the prizes in the classes in which they made entries. Swine were represented by one

breed, the Berkshires, and T. B. Snell was the only exhibitor.

Poultry on the other hand, were strongly shown. Anyone who has ever visited Lethbridge fair knows that poultry is one of its largest features. The society have splendid housing accommodation for this exhibit; they are encouraging the industry in every way possible. It is really marvellous the advancement made in Alberta during the past few years in poultry. The Government fattening stations at various places have demonstrated clearly the money-making possibilities of this enterprise. The farmers of the province are taking the business up more and more. It makes a good side line in dairy farming and a profitable one too, so long as prices run as they have for the past year. At the fair Barred Rocks made the best showing, though the entries in this breed were scarcely so large as they have been on former occasions. They were breeding pens of this kind that won out in competition with all others.

GRAINS, GRASSES, VEGETABLES, FRUIT.

This exhibit made one of the most attractive features of the fair. Grain in the sheaf, especially, came in for a deal of attention. In winter wheat the entries were large. T. Woolford, who got first in Winnipeg, was first again here. Grasses made a conspicuous display. The timothy, Western rye, red clover and alfalfa samples exhibited prove the certainty of this districts' hay growing possibilities. Some of the grasses shown were over seven feet in length. Vegetables, that is garden truck of all kinds, made a fine display. The Chinamen had this department pretty much to themselves and put up a good exhibit in roots, garden vegetables, cauliflower, cabbage, etc. This exhibit was one of the best seen this year in Alberta. The fruit show was good. Strawberries, raspberries, gooseberries, red, white and black currants, and a few apples, green of course at this season, formed the exhibit. The strawberry display made by H. D. Whitney was of special merit.

The Irish Agricultural Enquiry.

Few people anticipated any sensational findings by the Committee of Inquiry, which recently completed its investigations into the Irish Department of Agriculture and Technical Instruction; and, now that the report has actually seen the light of publicity, one looks in vain throughout the bulky document for recommendation of any sweeping changes either in the constitution or policy of the Department. The Committee consisted of five members, whose names I have previously given, including the Hon. John Dryden, of Canada, and they were instructed to inquire whether experience had shown that the Department's methods were suited to the needs of Ireland, and to report on the relations between the Department and local statutory bodies, the funds at its disposal, etc. At seventeen sittings, all over Ireland, voluminous evidence was taken, and it must be conceded as creditable to the Department that its operations have stood so well the test of this scrutiny, and that its work, beset, as it was, by such difficulties during the first seven years of its existence, has been so generally approved of by the Commissioners. An interesting feature, however, is the fact that two reports have been issued—a majority signed by four, and a minority of one, bearing the signature of Mr. W. L. Micks, of the Local Government Board, and formerly a prominent worker in the earlier days of the Congested Districts Board.

The majority report, in its general tone, reviews favorably the various operations of the Department, and, among the few recommendations which it contains, perhaps the most interesting is that, in the opinion of those who signed it, the Vice-President should not be a member of Parliament. Again, they are not in favor of substituting for the Department a board, either wholly or partly elective, as they think that continuity of policy and efficiency of administration are best secured by the responsibility being vested solely in the head of the Department. The Vice-President should not be a permanent and pensionable civil servant, but an official in charge of the administration in Ireland, of the Act of 1800, establishing the Department. With regard to the suitability of the methods adopted, the Commissioners believe that the Department has been successful in stimulating throughout the country (1) a sense that in various directions improved conditions of agriculture are within reach of the farmer, and (2) a desire to take advantage of the methods by which that improvement may, in some measure, be obtained. The difficulties are admitted, by the report, to have been great; but, it is added, "the Department has had on its side the characteristic intelligence and quickness of the Irish people." The system of training Irish itinerant instructors, and the instruction given by them, have in the opinion of the Committee, been attended with marked success. Reference is also made to the harmonious co-operation of the various local bodies. Much of the report deals with the relationship between the various councils and boards comprised in the constitution of the Department, and the opinion is expressed that the Council of Agriculture (representing the 32 counties), two-thirds of the members of which are popularly elected



POULTRY SCRATCHING SHEDS AS ARRANGED AT A MODERN POULTRY PLANT AT READING, ENGLAND.

and one-third nominated, should not have its powers extended beyond its present functions; viz., a deliberative and advisory body, with the privilege of nominating two-thirds of the Agricultural Board, which, in turn, controls the finances of the Department. It will not, however, interest Canadians to be brought through all these intricate details of inner constitution, and I refrain from doing so.

If the majority report lacks anything to cause undue excitement, the minority document, which Mr. Micks has courageously published, more than makes up for it. He urges the reformation of the Department, root and branch; but as the carrying out of his scheme would entail a yearly grant of a million pounds sterling for twenty years, this must make those who think his way rather dubious of hearing much of it again in the region of practical politics. Briefly put, Mr. Micks advocates the creation of a Development Department for all Ireland, which, to use his words, "should be altogether detached and free from the control of the Imperial Government and Parliament." This would take over all the development functions of the Department and the Congested Districts Board, and the present Department should have its functions restricted to education pure and simple, including experimental work, of course.

WHAT HON. JOHN DRYDEN THINKS OF IRELAND.

To the majority report are added a number of individual memoranda, one of the most interesting of which is that which comes from the pen of the Hon. John Dryden, who states at the outset that he was agreeably surprised with the general condition of the Irish farming industry. Setting aside the congested districts and bog areas, he regards the balance of the land as favorably comparing with most countries prominent in agricultural production, as to qualities of soils and possibility of improvement in its products. He alludes to the way in which agriculture and the training of those engaged in it were allowed to drift, and refers hopefully to the awakening within the past decade. He is confident that a good beginning has been made by the Department, but urges that people must not be too impatient for results, as, in his opinion, the full benefit will not be realized for some years. In the main, he regards as correct the ideals of those in charge, among which he specially approves the preparation of the young men and women both to teach and practice the principles of higher agriculture, at colleges and by the instrumentality of itinerant instructors. In 1906 there were 21 giving instruction in Agriculture and Horticulture, 28 in Poultry-raising, and 25 in Butter-making. In many counties Mr. Dryden found the instructor exceedingly popular, and in great demand, with astonishing statements current as to benefits received. He also deals in detail with the various live stock schemes for the improvement of horses, cattle, pigs, poultry, etc., and, in connection with poultry, states that the system adopted was quite new to him. His statement to this effect leads me to believe that probably the scheme is unknown in Canada; therefore, I may not be far amiss in quoting a paragraph from Mr. Dryden's description. He says: "The Committee of the County Council selects the farmers in the various districts suitable to be their agent and employee in scattering in the surrounding country a better variety of eggs for hatching. He is required to put away all mongrel or cross-bred fowls, and accept and care for the fowls of the particular breed selected, according to instructions supplied by the Instructor of the Department. These fowls are furnished him, and, on the understanding that he supplies, at one shilling per dozen, at least 70 settings of eggs each season, he receives £5 from the Department. In order to interest the people in the scheme, a lady is employed as an itinerant instructress, holding meetings, visiting cottages, and stirring the people to take advantage of the opportunities offered. It has appeared to me that this scheme has very much to commend it, and it is easily seen that the whole egg and poultry product will soon be revolutionized. The increased output, as well as the improved quality, must add materially to the receipts of the people engaged in it. Besides this, the improved methods of housing and caring for the poultry will guard them from disease and much loss on that account. These are called 'egg stations.'"

In concluding a most interesting memo, Mr. Dryden remarks: "I have no hesitation in expressing the opinion that the agricultural work at present carried on in Ireland is worthy of the nation, having the effect of drawing the different elements more closely together, and in various other ways will bring about the most beneficial results, the full effect of which will only be clearly seen in years to come."

EMERALD ISLE.

Trading off Virtue and Honor.

EDITOR FARMER'S ADVOCATE:

May I ask for space to air a grievance in connection with our fairs. At the start I wish to say that I lay claim to expecting nothing very elevating or instructive from the side shows at a fair, but I hold that it is the duty of our fair authorities to see that there is nothing inside the fair grounds sanctioned by the management which is calculated to bring the blush of shame to the cheek of any man who prizes honor and decency above the financial success of an exhibition. I was told by a prominent official of the Brandon Fair that the police had instructions to close down anything at all loud or in any way suggestive. The so-called dance to be seen at the last two tents on the fair grounds during the entire exhibition for at least the last two years was most suggestively described outside as being for "broad-minded men and consisting of a dance from the neck down and the knees up." You need not blush to print it, Mr. Editor. Thousands of our young women in the company of gentlemen friends were forced to listen to this same phrase during the last two weeks. Inside these tents humanity wallows in the depths of uncleanness. The aim of the actors seems to be to give a full line of dirt, and they are artists in their particular line. The latest in obscene story, jest and song is followed by that most degrading and disgusting thing ever invented to makes rakes of men and prostitutes of women, the so-called "hoochy koochy dance"—something the devil through his fallen angels has used for many years and has not yet improved upon. And this is what a longsuffering public is asked year after year to stand for, to patronize and pay for, and why? There can be no better reason than that the financial side of fairs should be gratifying. Selling the honor and virtue of the youth of our land for gold! Shall we, the people, sleep on? Pipestone Mun., Man. A. E. SMITH.

Must have Co-operation.

EDITOR FARMER'S ADVOCATE:

Your excellent paper, as well as other papers, is certainly giving us farmers plenty of food for thought these days. In your July 2nd issue after pointing out that ten per cent. of our wheat value is dissipated in the present elevator system, the Grain Conference resolutions are turned down, etc., you also say "a better day may be looked for. Civilization is beginning a war on extortion, monopoly and sweatshop methods, etc."

A writer in the *Toronto Globe* also says, "In these days of substitution and adulteration it is well to deal only with reliable concerns." In doing so he says protect yourself and the reliable institution, and adds, "No Government or police regulation can do the particular duty that belongs to you, and all the forces put together would not protect you from substitution unless you co-operated with them by watching labels and seeing that you get what you called for. You can be your own pure food law, your own quality agent, your own best protector, and you cannot delegate these things to any other person or set of persons."

Now look, extortion, monopoly, sweatshops, methods, substitution, adulteration abroad in the land! We are told to look out for it everywhere. How can we expect a better set of men in the present elevator system than in other walks of life. Are they more honest than others? Are we to look for this spirit in the combinations working our grain trade as elsewhere? Will they, of all men on earth, fail to take advantage of the opportunities that may be offered them for the practice of any of the above-named performances. We often hear that God helps those who help themselves. Who has better chances to get this help than they? Are not millions of bushels of grain delivered into their hands without being either graded or weighed until passed beyond the owners' control? Have they not helped themselves? Are they not still doing it? Have they not beat the farmers at every turn? Is there not a network of conditions woven like a web around the farmer which compels him to deliver his grain into their hands thus? Have the grain growers not organized to better facilitate the playing of their game? Do I blame them? Well, not particularly. No, it seems to be admitted by all that the instinct is abroad; we are to guard against it.

What shall we do? I think there should be a convention of representative grain growers, millers and railway men of Manitoba, Sask. and Alberta, called by the Saskatchewan Grain Growers' Association to meet at Moose Jaw when the Royal Grain Commission returns, and invite them to be present. The representatives should be about ten from the grain growers of each province, two railway men, two millers, Mr. Castle and Mr. Horn. It might be well also to have representatives from the banks and elevator men, say two each.

This conference should be able to adopt a plan that would work out in the best interest of the whole West, and the Royal Grain Commission could then make such representations to the Dominion Government as would ensure their being adopted. Manitoba Conference practically failed: it could not hope to do much else. With all due respect to the pro-

motors of it, Manitoba can hardly hope to legislate for and operate the whole grain trade of the West. The problem is still unsolved, but that does not prove there is no solution.

The questions involved are large and intricate no doubt, and as you point out are still before the farmers, for on them falls the cost of the present expensive, unreliable method. Yes, before the farmers, railway managers of these Western provinces and the Dominion Government, Clifford Sifton said to young Liberals in Winnipeg in 1903: "The transportation problem was exasperating, inexcusable. Railways should be compelled to fulfil the obligations imposed in their charters, which would be done by appointing a Railway Commission." Have conditions improved?

Mr. Sifton said, also speaking to the grain dealers at that time, "When the grain grower comes to Parliament and says he objects to having his wheat go through the hands of middlemen losing thereby 6 or 7 cents per bushel, that Parliament as any Parliament would not be justified in putting the farmer in a position where he loses his legal profit, and no men such as elevator men could expect legislation that would compel the farmer to ship through the elevators when by so doing he loses money. Now these men have used existing legislation so as to compel farmers to use a service they can well do without."

Conference failed, Railway Commission failed, Royal Grain Commission yet to report, and the termination of present unsatisfactory conditions yet to come!

Farmers! Kick partyism out of sight and unite.

Moose Jaw, Sask.

FRED W. GREEN.

Crops in Southern Manitoba.

EDITOR FARMER'S ADVOCATE:

Up to Saturday the 10th inst. we had it hot and dry. Crops were whitening every hour and matters looked serious on the knolls, sand or gravel. A fair good rain fell on Saturday night and although it will not last long it may tide us over a critical period. With more hot weather some harvesting may be done in about a week, possibly a bit longer if cool. The crops have thinned out some during drouth and late sown is stunted on a good many fields. I hear our yield has been rated at 18 bushels. I wouldn't like to rate much of the wheat I have seen over 12 and there will be some all the way to nothing upon individual acres. Oats and barley are moderately good where sown in good time. Weather has been good for haying and mostly all of it is up in good shape so far. Summer-fallows have plowed badly; a good many only shaved, but it seemed almost impossible to get a 14 or 16-inch share down into the soil. This year's outlook seems to point to less average in crop and more work on less area. As is generally the case, too much to do plays havoc in some places. People rushed to sow, some before it was fit and did not work the land enough before sowing; some kept sowing till near July and considerable at both ends is very poor.

CORRESPONDENT.

Apple Crop Prospects.

The crop reports from the New England States and New York, show that the conditions for winter apples are almost as good as last year; but there is a great shortage on the whole crop. Michigan shows less than an average crop. The Canadian crop of winter apples will probably aggregate not more than an average crop or perhaps slightly below, taking into consideration all the exigencies yet to be met. On the other hand there will be a decided shortage in the United States of fall and early winter apples. Missouri, Kansas, Tennessee and practically all the states producing the apples that go upon the market up to Christmas time, report a very light crop, in some cases amounting to a total failure. Summer, fall and early winter apples in Canadian orchards will be decidedly light as a whole. Taking these conditions in connection with the probable light crop of apples, and only a moderate crop of all other fruits in Great Britain and Europe generally, it would seem that the demand in Canada for all classes of apples would this year be exceptionally good.

Judging from last year's prices and the conditions this year, it would seem that a good market is to be found in the Northwest. During the months of September and early part of October, 1906, the Northwest was receiving large shipments of American apples at prices that would certainly satisfy the Canadian grower. At the same time small growers were complaining to the Fruit Division that they had a surplus of Astrachans and Duchess.

Bulletin, Fruit Division, Ottawa.

Events of the Week.

CANADIAN.

M. S. McCarthy, M. P. for Calgary, will not be a candidate in the next federal elections.

Ninga and Killarney districts received a severe hailing the other day.

2500 cotton operators are out on strike in Montreal and Valleyfield.

A serious fire devastated the business portion of Oxbow on the morning of Aug. 14th.

The next annual meeting of the Canadian Union of Municipalities will be held at Medicine Hat.

A thunder storm, unusually fierce in its intensity, did considerable damage to Kenora, Ont., the other day.

Three men were killed and a score of others seriously injured by the explosion of a shipment of nitroglycerine, at the M. C. R. depot, Essex, Ont.

The C. P. R. have arranged for six harvesters' excursions this year from the East, leaving Ontario from Aug. 27th to Sept. 10th.

The Japanese population of British Columbia was increased the other day by the arrival of 1200 immigrants from Japan.

Two Japanese immigrants have taken up homesteads in Alberta. They are the first of their race to take up land in the West.

Bill Miner, the notorious train robber and road agent, who escaped from the B. C. Penitentiary the other day, seems to have got clear away. The police have lost all trace of him.

Baron's Gem, one of the most famous Clydesdale stallions in Western Canada, owned by R. H. Taber, Condie, Sask., died suddenly last Thursday. He was valued at \$3000.

The telegrapher's strike seems in a fair way to tie up the business of the whole continent. Every city in the United States from Minneapolis to New York is affected. Toronto operators have gone out in sympathy.

J. T. Gordon, of the firm Gordon and Ironsides, Winnipeg, denied absolutely the other day before the Beef Commission that there was any combine whatever among the meat packers, or that his firm ever received one dollar in rebate from the C. P. R. He denied that there was any understanding between his firm and Pat Burns of Calgary; that they would not buy from farmers as readily as from regular shippers; and declared that on a business turnover last year of nine million dollars worth of business they made a profit of 2.85 per cent.

BRITISH AND FOREIGN.

Los Angeles, Cal., celebrated the 126th anniversary of its founding on Aug. 15th.

Three men were killed and 100 wounded in a riot at Belfast, Ireland, last week.

Hail storms have destroyed over 50,000 acres of grain in North Dakota and Minnesota.

Erasmus Hering of Munich, Bavaria, who could read, write and speak in thirty-seven languages, is dead.

Spokane, Washington, is suffering from an epidemic of disease, new to physicians there. More than 1500 persons have been affected to date.

"Lord" Barrington, the bogus English peer, convicted of murder in St. Louis, has had his sentence commuted to life imprisonment.

Scientists the world over are deeply interested in the controversy now being waged in British scientific circles over the decomposition of the elements and their transmutation into other forms by radio-activity.

It is reported that further indictment will be made against the Standard Oil Company, for "maintaining a substantial monopoly, and oppressing the public with extortionate prices, for advancing prices unwarrantedly and for maintaining bogus companies to evade the laws."

Things to Remember.

Kildonan and St. Paul fair Sept. 25th—26th
Provincial Exhibition, New Westminster, B.C. October 1 to 5

MANITOBA FAIRS.

Woodlands September 27
Kildonan September 25 and 26
Gilbert Plains October 1
Plumas October 2
Meadow Lea October 3
Macgregor October 4
Beauséjour October 4 and 5
Selkirk October 9 and 10

ALBERTA FAIRS.

Vermilion Sept. 10 and 11
Vegreville Sept. 11 and 12
Didsbury Sept. 13
Olds Sept. 16 and 17
Magrath Sept. 19 and 20
Raymond Sept. 24 and 25
Cardston Sept. 26 and 27
Medicine Hat Oct. 1 and 2
Lacombe Oct. 3 and 4
Ponoka Oct. 7 and 8
Wetaskiwin Oct. 9 and 10
Innisfail Oct. 11
Nanton Oct. 15
Pincher Creek Oct. 16

SASKATCHEWAN FAIRS.

Lashburn September 12
Lloydminster September 19 and 26
Radisson September 28
Quill Lake September 20
Watson September 24
N. Battleford October 1 and 2
Duck Lake October 2
Kinistino October 8
Tisdale October 17
Melfort October 15 and 16

MARKETS

Read this summary of conditions.

The weather conditions during the past week or more checked the settling tendency of the wheat markets and sent prices back again to where they were about the end of July; and this in spite of the fact that the disorganization of the telegraphic service owing to the strike of the operators, tended to make buying very conservative. But the unexpected and unusually cool wet weather which has prevailed just when ordinarily we have warm ripening days and the fact that the weather has come just at a crisis in the wheat crop, have given a firmness to the bull's side of the market that is likely now to keep prices up in spite of the most favorable weather reports and a considerable falling off in export demand. The crop in the whole spring wheat belt

is late and is being held back by the low temperatures and wet weather. Every farmer knows that if wheat is not ripe on the first of September it must have most exceptionally bright warm weather to bring it to maturity, and upon this condition of the weather in September depends whether we reap a fair crop or not. The probabilities are that there will be a lot of green wheat cut and a lot more that will never be cut. Only the most exceptional weather will now insure complete ripening, but we have the consoling fact that for the past ten months the weather has been anything but usual.

In Europe wet weather has prevailed, so that there is an immense falling off in the crops. Argentina is the bright hope of the English millers and that country appears to have harvested a large crop of good quality coming to move local conditions. The country appears to be preparing for the handling of an ordinary crop and is marketing freely of old wheat. Few people conceived of the amount of wheat that was carried over from last year and many of those who are forced to sell now to make room or raise money are carrying parcels into December or October on the option market. The whole tone is bullish. And although Mr. Castle, the chief warehouse commissioner, sent a very optimistic report to his department at Ottawa, it was no doubt prepared when conditions were more favorable and would be considerably modified now.

Oats continue to be good value and are advancing. The dry hot weather early in the season has shortened the crop especially in the States, which indicates that supplies will be short.

Prices are, for grain in store at the lakes: No. 1 Hard 90c, No. 1 Nor. 89c, No. 2 Nor. 86c, No. 3 Nor; oats 40c; barley, No. 3 49c, flax, \$1.20.

PRODUCE AND MILLFEEDS (WHOLESALE).

Brans, per ton 17.50
Shorts, per ton 18.50 @ 19.00
Chopped barley and oats 24.00
Barley 22.00
Oats 27.00
Hay, per ton (cars on track, Winnipeg), prairie hay 9.00 @ 11.00
Timothy 13.00 @ 14.00
POTATOES, new 1.10 @ 1.15

BUTTER—

Fancy, fresh made creamery bricks 24 @ 25
Boxes, 56 lbs. 22
Boxes, 28 and 14 lbs. 23
Extra fancy dairy prints 19 @ 20
Dairy in tubs 17 @ 18
CHEESE, Man. new at Winnipeg 10 @ 10½
EGGS, Manitoba fresh gathered, f.o. b. Winnipeg, subject to candling 17 @ 18

LIVE STOCK.

Best export steers off cars \$4.50 to \$4.75, good \$4.10 to \$4.20; best butchers \$4.00 to \$4.05; good heifers \$3.75 to \$4.00; cows \$3.50 to \$3.75; bulls, \$2.00 to \$3.25. Sheep \$6.00 to \$6.50; lambs, \$7.00 to \$7.50. Hogs best bacon, \$6.50; heavy, \$5.50; rough, \$4.50.

TORONTO LIVE STOCK.

Export trade has become more evenly adjusted of late and several shippers are doing regular business. The top prices range between \$5.00 and \$5.25, with good average stuff at \$4.75 to \$4.90, butchers \$3.50 to \$5.00, stockers \$2.25 to \$3.75, depending upon the size and finish. Hogs, bacon, \$6.75.

CHICAGO LIVE STOCK.

Beeves, \$4.35 to \$7.50; cows and heifers, \$1.50 to \$5.40; stockers and feeders, \$2.50 to \$4.90. Texans, \$3.85 to \$5.40; westerns, \$4.40 to \$6.75. Hogs.—Mixed and butchers, \$6.10 to \$6.57g; good to heavy, \$6.00 to \$6.85; rough, heavy, \$5.60 to \$5.95.



SOUTHWESTERN MANITOBA FARM BUILDINGS, WITH THE HOME BUILDERS.

HOME JOURNAL

Life, Literature and Education

IN THE WORLD OF LITERATURE AND ART.

Professor Grainger of Wawanesa has passed the examination at the Toronto College of Music with first class honors.

* * *

Fred Nye, a brother of the late "Bill" Nye, died in New York. He also had written much humorous stuff and was formerly on the staff of the *Chicago Herald*.

* * *

It will interest Roycrofters and Philistines to know that after a stubbornly fought legal battle extending over a period of two and a half years, Elbert Hubbard, founder of the Roycroft Shop at East Aurora, was condemned to pay to Frederic W. Gardner of Chicago, \$20,000 damages for breach of contract. Three years ago Hubbard and Gardner entered into an agreement, effective until the death of either party to the pact, whereby Gardner was to have absolute charge of the cash advertising inserted in the *Philistine* and *Little Journeys*, the Roycroft publications. Gardner succeeded in advancing the rate from \$25 to \$100 a page. Hubbard then began to solicit himself. An injunction was issued restraining the latter from accepting advertisements, from advertising his products in either magazines, and from accepting merchandise in exchange for advertisements. The injunction is made permanent.

* * *

Nearly a thousand Esperantists from Europe and America were congregated at historic Cambridge when the third congress of the devotees of the new universal language opened its inaugural business session. The Dean of Ely received the visitors, and this evening "Bardell vs. Pickwick," in an Esperanto translation, will be presented by an international company. To-morrow there will be an open air entertainment, at which "God Save the King," will be sung by an Esperanto chorus. Friday evening a ball will be held, which the delegates will attend in the native costumes of their country, typifying the international character of the new language. Next Saturday the delegates will come to London, arrangements having been made to entertain them here for many days. The business session was held to-day in the Guildhall, and developed much enthusiasm, as the representatives of different nations reported the great and steady gains of Esperanto. To-night's dramatic production is intended to prove that while Esperanto has always been considered a severely utilitarian language, useful mainly for commercial purposes, it is also capable of serving the ends and purposes of art.

The convention at Cambridge is "la tria kongreso," or the third congress of the International Esperanto Society. The first was held in Boulogne in 1905 and was attended by 1,800 delegates, representing eighteen different countries, including the United States, Mexico, Canada, Persia and Chili, in addition to European nations. Last year's meeting was held at Geneva, where the municipal buildings and government university were thrown open to the delegates. Ninety delegates attended from England and Ireland, and five from the United States.

At the present convention the London County Council and Scotland Yard are officially represented, the latter to determine whether Esperanto would be useful in the conduct of international police work.

SAVAGE SUPERSTITION NOT DEAD YET.

In spite of twentieth century western civilization, there still exists among the original possessors of this land superstition as degrading as filled Europe during the Dark Ages. Fortunately this unenlightened darkness is confined to a few tribes whose wanderings have carried them beyond the pale of civilized influences, and is therefore rendered conspicuous by its rarity. One example has recently been brought to light.

In Keewatin, just beyond the eastern boundary of Manitoba, is a tribe of Cree Indians, practically Ishmaelites, driven into the wildest part of an almost unsettled district because of the disfavor aroused by their savage modes of life. These Crees have a belief that a person delirious from any cause is possessed by an evil spirit, We-te-go; and if he dies during the delirium his soul is lost, while if he recovers physically, he is still a maniac with murderous and cannibal tendencies. To release the sufferer and to protect the rest of the tribe, the sick one is carefully watched and during a lucid moment is put to death with some religious ceremony by the chief of the tribe in the presence of the nearest relatives.

Rumors of this unnatural practice have from time to time sifted down into the settled districts for the last twenty-five years, but evidence was wanting and not much attention was paid. But of late years the feeling of many of the Indians has been against this cruelty perpetrated in the name of religion, and the increasing settlement has led to the acquiring of more definite information.

As a consequence when word came that a young squaw, Sap-was-te, wife of the son of the chief, John Pac-ja-quan, had been put to death according to these savage rites, two constables of the R. N.-W. M. P. were sent from the post on the Nelson River to enquire into the matter. It took them two weeks to reach the camp and by diligent questioning they gathered that the young woman had contracted a fever and become delirious. The old chief, her father-in-law, with his nephew, prepared to carry out the usual custom, and in the presence of the whole camp they strangled her.

Convinced of the guilt of these two men, the police arrested them with two eye-witnesses of the scene, and brought them to Norway House where their trial will be held before Colonel Saunders from the headquarters at Regina. A noticeable feature of the arrest was that, remote as this tribe is from any settlement, they had developed a healthy respect for the mounted redcoat, and no resistance was offered. It is not probable that punishment will be dealt out to the full extent of the law, as the crime seems to have arisen solely from ignorant and superstitious fear, but some penalty sufficiently drastic to prevent the repetition of this cruel act will be dealt out to these men if their guilt is proven.

CONDITIONS IN THE CONGO.

The Congo Free State is a large territory situated in Central Africa with a short coast line on the Atlantic. It is a fertile valley drained by the Congo River, which is over 3,000 miles long and empties a greater volume of water into the Atlantic than any other river save the Amazon. This state was originally connected with Europe and European history through the explorations of Henry M. Stanley, the noted African traveller, and Leopold II of Belgium, whose restless energy seized upon the knowledge Stanley was able to give him and turned it to good account.

In 1876 the King of Belgium summoned a conference at Brussels to discuss the question of the exploration and civilization of the interior of

Africa and the opening of it to the commerce, industry and scientific enterprise of the European world. Delegates from the most important countries came in answer to the call and an International African Association was formed to begin the movement. Interest in the scheme did not long survive the close of the convention, except in the cases of France and Belgium, who each scrambled for rights in the new territory, and of Portugal, aroused from lethargy to defend what she regarded as her undisputed possession. The Belgian king, however, established the first post and settlement at Leopoldville on Stanley Pool in 1880, and treaties were made between him and the native chiefs. This was followed by the establishment of more stations along the river through the efforts of Stanley.

In 1885, the Belgian legislature conferred upon Leopold the exclusive sovereignty of the new state, and he announced the appointment to the Congo International Conference which met in Berlin in the same year, stating that the possessions of the Congo Association were henceforth to be known as the Congo Free State and were to be under his rule. The conference then passed an act recognizing the state as a power, on condition that it remained neutral and opened its territory to the trade of all countries. The boundaries were defined by the international conference, but as years went by the influence and interest of the other powers waned, and almost the last act before the power became practically that of Leopold and Belgium, was to authorize the levying of some import duties to help pay expenses of the administration. In 1889 the King bequeathed his sovereign rights in the Congo Free State to Belgium, and the latter had the power to annex the African territory within ten years.

The greatest enemy to the early growth and prosperity of the Congo were the Arab inhabitants of the country who resented the interference of the Belgian Anti-Slavery Society in the slave trade by which they lived. Not until 1894, in spite of continued warfare, were these natives in any way subdued, and even now they carry on the traffic in slaves by stealth.

It is well known that the revenue obtained from the country does not pay the expenses of the extravagant administration. The chief industry of the country is the cultivation of the rubber tree and the harvesting of its products. In the effort to make this industry yield paying returns a system of oppression and extortion has been instituted by the Belgian officials in the Congo. The tale of the atrocious cruelties practiced upon the natives is a horrifying one, and in spite of strenuous denials by the authorities, enough details have been supplied by missionaries, travellers and other creditable eye-witnesses to make the civilized world certain that all is not as it should be in the Congo Free State.

In the interests of civilization a Congo Reform Association has been formed to make investigations. It has discovered that Leopold has no intention of allowing his Parliament to deal with the government of the Congo in any way disapproved by him, and that he is prepared to arrange and re-arrange his cabinet until he can get a ministry to do exactly what he wants, so that even if annexation of the two countries took place it would still be Leopold who held the power.

Sympathy with the natives under Belgian cruelty is felt by all the nations, but the question of interference, while being earnestly considered, is a very delicate one to handle. Great Britain would be accused of reaching out for more territory if she took the lead, and the strongest hopes seem to be placed in the United States, which has nothing to gain or lose by intervention. It is said that by granting to an American syndicate valuable concessions in the Congo, Leopold is hoping to persuade the Americans to express no adverse criticism of his rule.

If half the stories told of this unhappy country be true, it is high time that intervention came from the countries claiming civilization and Christianity.

CHILDREN'S DISEASES

By MARY E. ALLEN-DAVIDSON, M. D.

If the domestic life of the Canadian West is remarkable for one thing more than another it is the large proportion of young children in the population, and this being a new country the science of sanitation is not so far advanced as in more densely populated and older settled districts; hence we anticipate our readers will follow with interest Dr. Mary E. Allen-Davidson's discussions of children's diseases. Dr. Davidson is already favorably known to the Farmer's Advocate and Home Journal readers through the publication of her series of articles upon Household Science.

DIARRHŒA IN CHILDREN.

CAUSES, PREVENTION, TREATMENT.

Diarrhœa is not a disease properly. It is a symptom, and is found in every degree from a simple looseness of the bowels to profuse watery evacuations, from which death may result in a few hours. It is a far more serious condition in children than in adults, for several reasons:

(a) Children need more nourishment than adults, proportionately, because they are growing. Material must be taken in for building up their growing bodies, as well as for nutrition. Diarrhœa sweeps away the food before it has done its work, and renders the body incapable of taking more nourishment.

(b) The blood of children is poorer than that of adults, hence more dependent on a continuous supply of nutriment.

(c) Children have a feebler hold on life because of only partial development. When dealing with the causation of diarrhœa, we must take into consideration the condition of the child and the state of his surroundings.

As these articles are written for mothers who are far from medical aid, I shall deal mostly with conditions found in the country. While a doctor, if available, should always be summoned when diarrhœa develops, because bad diarrhœa is not a case for home treatment unless unavoidable, the prevention of diarrhœa is most emphatically a thing almost entirely in the hands of mothers, at least in the case of young children. For this reason every mother should be trained to recognize and avoid what is not wholesome for the child.

GENERAL CAUSES OF DIARRHŒA.

1. Chill of the body surface. This may be contracted in the bath, or from exposure of the legs, neck, arms or abdomen through wrong methods of dress or clothing.

2. Cutting teeth. Sometimes a mild diarrhœa which might be called over-activity, accompanies tooth cutting.

3. Lack of cleanliness. This will be dealt with further on.

4. Insanitary dwellings.

5. Infected or unsuitable food.

6. Impure drinking water.

7. Sudden changes of temperature and extreme heat.

Sudden drop in temperature may be responsible for surface chilling owing to insufficient clothing—and consequent diarrhœa. Sudden rises cause general relaxation and in some children always induce less or more diarrhœa.

Prolonged high temperature is specially pernicious because (a) flies are so numerous, so persistent and hard to eliminate; (b) food decomposes so rapidly in hot weather; (c) prolonged high temperature is debilitating even when it does not produce any "heat exhaustion." It is quite probable that air, too warm, not only fails of the tonic effect of air colder than the body temperature, leaving the tissues toneless and relaxed, but that these failing to do their accustomed work especially in throwing off the waste products of the body, a form of self-poisoning results of which diarrhœa is a symptom, the body thus trying to "clean house."

PREVENTION OF DIARRHŒA.

Now how are mothers to guard against this state? Manifestly by putting away or destroying the causes of the trouble. Now, mothers, don't get discouraged and say you can't fight so many troubles in your busy life, that you can't carry these causes in your mind. Well, for that very reason I have tabulated the causes that are the greatest sinners. I am a busy mother myself with three young children. Now, you mothers, just write these causes out and hang them up where you can see them. Then think which

cause is most in evidence in your home. Get rid of that one first. You will find that when you think and plan systematically to fight unwholesome conditions, your work in the home will be helped, not hindered. It is better to take even a lot of extra care to prevent the trouble than to have the extra work and care and anxiety, caring for children who must have constant attention when suffering from this complaint. Prevention is always better and cheaper than cure, no matter how expeditious the latter may be. I shall take these causes in order and try to tell you how to get rid of them, and so, of course, prevent diarrhœa.

1. Guard against chill by sensible clothing. Children under five years of age should wear woollens next to the skin. These should, of course, be very light in summer. Don't overload the trunk by a waist, several little petticoats, and dress, just to make the child look nice and leave the legs bare, especially not during the chill of evening. If the child is used to going barefooted as well as bare-legged and is sturdy, he will not be so likely to take cold. The custom of having the feet shod warmly and the poor bare legs left without protection, especially here in Western Canada where the changes in temperature are so sudden, is responsible for many "colds." Delicate children, those subject to colds or bronchitis, should wear woollen or cashmere stockings. Most mothers know what conditions will give the child "cold"—avoid these.

2. In teething, if the gums are swollen and red, prick them with a needle on the outside till they bleed freely; this relieves the swelling and pain. If the child is feverish give a warm mustard foot-bath at night and sponge off the body with tepid water in which a little soda has been dissolved. For the foot-bath put a tablespoonful of mustard in two gallons of water. Put in a pail so that the water will come up round the legs and have the water pretty warm. Watch the food. Give only the simplest food and not much of that; no meat, and, right here, I want to say that no child should get any meat before the age of two years—better not till after five years of age. Bread and milk, part or all of a soft boiled egg, milk puddings, soup, etc., supple a simple diet, and sufficient variety can be obtained. Give starchy foods sparingly until after two years. That is, do not make all the meal of these. To allay thirst in teething give sips of cold water often rather than large drinks at longer intervals. To drink too great a quantity of water tends to looseness of the bowels.

If the bowels get too loose, of course, give a dose of castor oil. Treatment will come later, though.

3. Lack of cleanliness.—Especially do nursing babies suffer. They take in a lot of foreign matter with their daily supply of nourishment. Mothers from want of knowledge or want of thought are often extremely careless in many ways. They handle the breast with unclean hands, and then nurse the child without cleaning the nipple. The mother's undervest becomes soaked with milk; this ferments and the products render the breast a source of danger. Mothers who are nursing should wear clean, absorbent pads of white butter cloth next to the breasts. These should be changed frequently. The hands should always be washed before nursing the baby. Wash off the nipple with clean water before putting into the baby's mouth. If there is the slightest trouble with the baby's mouth, wash out before and after nursing. Indeed, it is best for the health of the child to do this as a matter of routine, and always during the hot months when so much greater precaution is necessary, because such slight causes will set up fermentation then. To do this, have clean water that has been boiled; add a teaspoonful of salt to the pint; keep covered. Keep a package of absorbent cotton on hand, or a bit of clean rag will do.

Be sure it is clean—the absorbent is better. Take enough to go around your little finger (see that the finger is clean), wrap round the finger, dip into the salt solution and sweep over the roof and back of the mouth. Now another piece and wash between the gums and cheeks, upper and lower; lastly, another fresh wrapping and wash over and under the tongue. Do this lightly, taking fresh wrapping for your finger each time. Babe soon gets used to it and has a refreshed feeling in his mouth after his mouth-wash.

Another way in which baby is victimized is by those abominations called "comforts." As soon as baby is able to yell lustily one of these "gags" is thrust into his mouth and is his inseparable companion for months. I have seen these comforts fall on to a dirty floor, and an older child seize with begrimed fingers and pop into the "escape valve" time and again as often as the comforter would be expelled. There was no relief; Bub simply had to swallow his wrath and countless microbes at the same time, and suck away till sleep overcame him or his mother could come. The use of the comfort is a filthy practice and an outrage on the helpless. There is also the danger of altering the shape of the mouth by the constant pressure on the gums, especially as the child is likely to form the habit of "thumb-sucking" when deprived of the "comfort." The protrusion of the upper gum will cause the upper central teeth to project over the lower, more especially if the child sucks his thumb. This is disfiguring. The preservation and the health of the teeth demand that there be sufficient contact the upper and lower teeth to allow of grinding.

In bottle-fed babies, trouble arises from unclean or unwise feeding: (a) In using improper feed bottles. Bottles with a long rubber tube should not be used, as the tubing is exceedingly hard to clean if the food is ever allowed to dry or ferment in it. Use a nursing bottle, having the nipple with an opening in the bottom stopped by a hard rubber cork. This bottle is very easily washed. Always wash out with warm water immediately after using. Scald with boiling water and put into a solution of soda and water, one teaspoonful of soda to a pint of water; nipple and cork to be cleansed each time and kept in the same solution. (b) From fermenting food. Never prepare more than one feed at a time. After the child has fed discard what is left, thoroughly clean the bottle, and keep as above. In older children lack of cleanliness will cause diarrhœa. They should be taught to exercise the greatest care in thoroughly cleansing the hands before eating, and always after coming from the water closet. Insist on this. Tell them why and form the habit of washing the hands every time. Watch younger children. They are too young to discriminate, and will often put in their mouths, handle, and even eat the most filthy stuff.

If there is diarrhœa in the house be vigilant to prevent spreading. Cleanse the child thoroughly after each motion, and keep no soiled clothing lying round. Better pour boiling water over what can be treated in this way, such as diapers. In short, see that the others do not come in contact with the evacuations. And *exclude every fly*. Flies crawl over and become loaded with the excreta and then alight on your food and infect it. More of this later.

(4) Insanitary Dwellings.—See that children stay out-doors almost entirely during the hot weather; also that their sleeping rooms are well aired. The matter of insanitary dwellings was so fully discussed in "Household Sanitation" that I hesitate to repeat; but, a few words—exclude flies, dampness and odors; also soiled clothing. Indeed no clothing should hang in a sleeping room, but I know how small some houses must be. Just remember that foul air and stuffiness are bad for your child, and I know

you will make the air of the sleeping room pure by keeping the doors and windows open. Never leave bedroom slops standing, empty early. Manure heaps, foul drains, slops thrown in the yard, rank growths of weeds or scrub, anything that harbors dampness or filth or creates foul odors and swarms of flies, are all most prejudicial to health, and should be removed or rendered harmless at once. If these are allowed to remain fouling the air during the debilitating heats of summer, the vitality of the children will be lowered by breathing this unwholesome air and they will be much more prone to the infection which is constantly present where uncleanness lurks.

5. Infected or Unsuitable Food. Food infection results from: (a) flies. We are not sufficiently alive to the danger of infection from flies. In many homes almost no care is taken to exclude these disease bearers. The open, unlidded closet, close to the back kitchen, the slop barrel, or worse—all the kitchen refuse thrown into the back yard to steam and rot in the hot weather, or the manure heap close to the house, may supply the breeding and banqueting ground for thousands of flies, every one of which can carry enough filth on his six hairy legs to give your child a fatal dose of diarrhoea. Parents, aren't there some of you who are reading my words, while the flies are so thick in your home that you can't get peace to read? Do you chase them off what you eat, fish them out of your milk and tea? I know it is so. I have seen it often. Well, I wish I were possessed of some power that would impress on your mind that flies are more deadly than arsenic or strychnine. Not one in ten thousand is poisoned by these drugs, because every one is alive to their deadly effect, and, moreover, comparatively few people ever come in contact with these poisons—one has to go after them and has considerable trouble to get them. But every one is subject to the poisonous infection carried by flies. These pests are innumerable, are everywhere. They infect food, drink, hands, eyes, sores, in short everything they touch. Parents, do wake up and think! Don't you know these flies must be unspeakably abominable from your own observation? Have you ever seen any filth in summer that was not covered by flies. Human and animal excreta, carrion, any foul substance, you find hidden by swarms of flies that soon become the color of the rottenness they are crawling over. I am speaking as plainly as I know how, hoping to rouse you to the danger of flies in the home, and that you will closely screen the doors and windows, putting good springs on your screen doors to keep them shut. Enlist the help of the children to keep out flies. Once during an epidemic of *cholera infantum* I was called to a home where one child was ill. The flies were thick as a cloud. The child's clothing was soiled and care had not been taken to remove all soiled clothes. The flies simply could not be kept off him. Soiled places would be covered with them the moment after they were driven off. Supper was taken by the

rest of the family in the same room. And every article of food paid toll to the flies. In a short time every one in the home was infected. Now, the original infection may have caused all the trouble, but I firmly believe the flies were responsible for part of it. Here is an item that I quote from the *Neepawa Press* of Aug. 2nd.

The insertion of such items by local papers during the hot season is both timely and helpful. Under the caption of "Flies as Disease Bearers," it says: "The United States Department of Agriculture has started a crusade against the common house fly, and is carrying on extensive experiments as to the best methods of banishing it from the abodes of man. The fly has been found to be not only a nuisance, but a menace to man's health. Its hairy body carries both disease and death.

"Many epidemics which sweep over communities in the hot season, have been traced to the fly. Having its origin in filth, it brings with it the bacteria which breed in filth. And as it moves about, now crawling over refuse, now over the food on the table, flying from the lips of the sick to the lips of the healthy, it is said to be more dangerous to modern society than were the wild beasts to primitive men.

"The high mortality among the children in the congested districts of a city, where families are closely crowded together, where refuse accumulates fast, where food is often kept in living rooms, is due to a large degree, so scientists now say, to the fly. Infant diseases chiefly prevail in the hot season when flies abound. Dr. J. T. C. Nash, in the *Journal of the Royal Sanitary Institute*, giving his experience as an English health officer, says that the fly is responsible for the deaths of many children, because of polluting the milk which they drink. "It is a matter that has been entirely overlooked," says Dr. C. O. Probst, recently, "but we now know that the common house fly is an agent of importance in carrying the germs of typhoid fever. It was formerly believed that the germs were only carried in water, milk, or other liquid food. Flies both breed and feed in places where the germs are to be found, and then, flying into our houses, no doubt often carry the germs and deposit them on our food."

2. Food may be rendered unfit for use through fermentation. Do not use "soured" food, meats that have become tainted, or that have been even slightly infected by flies. Watch your canned stuff. Canned vegetables are often spoiled. Canned meats too should be rigidly scrutinized. Indeed, I would say canned meats should be entirely avoided in summer by adults and always by children.

3. Fruits. Mothers will have to be guided by their own judgment here. Ripe raspberries and strawberries often cause constipation, but where children have the run of the garden and are apt to eat unripe currants, gooseberries, etc., and add a few raw turnips and carrots, and green peas in all stages of greenness, trouble is pretty likely to develop. When the corn comes in

there is more of "it." Most mothers know these dangers and forbid such indulgences.

In regard to "store" fruit, bananas are pretty safe, oranges comparatively so, because the edible part is protected from infection, though some children get diarrhoea from eating these, but cherries, plums, pears, peaches, grapes, apples even, work havoc.

Fruit is handled without regard to cleanliness. The hands of the pickers are not immaculate, nor are those of the sellers; fruit is exposed in boxes on the street for dogs to nose over or worse, for street dust—and just think of its composition: animal excreta, pulverized refuse of all kinds—to settle on it, for flies to frolic on and over at will. Children get this fruit and eat it, skins and all, without its having been washed even. Is it any wonder they get diarrhoea? Peel or scald, or at least wash thoroughly, all fruit before allowing the children to eat.

As to milk.—The milk that children use should be sterilized. Put milk into an absolutely clean sealer. Put into a deep vessel having enough water in to come up two-thirds the height of the sealer. Do not quite fill the sealer with milk. Put on the top and ring, but not the rubber. Put vessel on stove, and bring the water to the boil. Set up and maintain this heat for half an hour. Remove sealer and keep in a refrigerator or other cool place for use. A cloth should be placed in the bottom of the vessel to guard against breaking the sealer through uneven heating. Many simply "scald" the milk, which renders it much safer to use. To render drinking water safe, boil and then cool and set away in a covered vessel. If poured from one vessel to another from a height through a wire strainer, part of the "flatness" will be removed. Keep in the refrigerator or the coolest place you have. When the children need drink add a little lemon juice, lime fruit juice, pine-apple juice or black currant juice to the water. This makes the water more palatable and refreshing. Some authorities claim that pine-apple juice is a splendid bowel disinfectant and that orange, lemon lime and black currant juice are all cleansing and tonic to the digestive tract.

Make the providing of wholesome and palatable drinks for your little folk a special object, during the hot weather. To sum up. "Eternal vigilance" be your watchword. Fight filth and flies, especially in regard to food and drink contamination. Don't overfeed or feed at irregular times.

Clothe the children sensibly. On hot days lessen the clothing, but in delicate children do not leave legs, arms or feet exposed; protect enough to prevent chill if the temperature falls.

Ventilate your sleeping rooms and clean up your yards. Especially look to the closets. See that they are lidded and the lids kept down. Keep the contents covered by earth, ashes or lime.

The next article will be on the treatment of diarrhoea.

THE DUTY OF LEISURE.

And He said unto them, Come ye yourselves apart into a desert place, and rest awhile: for there were many coming and going, and they had no leisure so much as to eat.—St. Mark vi.: 31.

"God's thoughts are not as our thoughts: we look on
Dreading to climb some mountains
far away,
Counting the sharp stones on its tedious way.
He cares for our small troubles, day
by day
Smoothing them down.

"We keep our patience for our greater cares,
And murmur, unrepenting, o'er the less;
Thinking to show our strength in our distress.
His patience with our hourly fretfulness
Still gently bears."

Yes, but though God may be very patient and forbearing with those who are indulging in the sin of fretfulness, it causes so much unhappiness and destroys beauty of character so effectively that we must rouse ourselves vigorously to cure it.

THE QUIET HOUR

Solomon says: "The contentions of a wife are a continual dropping," and if continual dropping will wear away a stone, how much more easily can the peace and comfort of a home be undermined by one person who indulges in the habit of fretting. It is a wonderful help and inspiration to everybody when one member of the household can always be depended on to wear "a glorious morning face," and keep the morning freshness undimmed all day, radiating joy everywhere. And we all know how depressing it is to our spirits when one of the family is "blue," looking on the dark side of things, fretful and complaining, pale and forlorn. None of us want to be wet blankets, extinguishing the brightness of home life; but sometimes the effort to be bright and sweet seems almost too great to be kept up. Gladness should never be an artificial thing. When it is put on from the outside, it has not the true ring. So, if your smiles are forced and unreal, instead of being the natural expression of the gladness that is within the soul, it is time to go to the root of the matter and attack

first causes. Indeed, sensible people will not wait for unhealthy symptoms to show themselves, but will try to get the soul into a healthy condition, and keep it sound and sweet all the time. And one good way of keeping the soul healthy is to keep the body healthy. The old-fashioned idea that sickness of body was likely to add health to the soul, is rapidly giving away to more sane conceptions of our mysteriously complex being. It is true enough that the soul can ring graces of trust and patience and heroic endurance from the most adverse conditions, but it is not an easy matter to be sweet-tempered and bright when the body is in a state of restless disorder. Our Lord seems to have lived in a perfectly healthy body—the rightful heritage of One who never broke any of the laws of health, which are the laws of God. And he wanted to keep his disciples in a well-balanced condition, therefore, He guarded against overstrain—as we see in our text. They could hardly get leisure to eat their meals in peace, where they were; therefore He tenderly and wisely commanded

them to go somewhere out of the rush of work, so that they might "rest a while." To disobey such a wise and loving command would be foolish as well as wrong. They wanted to live lives of devoted service—as you do—therefore it was necessary to take a real holiday, in order that, with body, mind and spirit refreshed and invigorated, they might plunge with new zeal and eager energy into the work He had given them to do.

The longest way round is often the shortest road to any goal, and a holiday is often the real duty of people who have a great deal of work pressing on them. I am carrying out my sermon at this present moment, having turned my back on the city—just because there is any amount of work there, begging to be attended to—and I am having a very restful time with dear friends, hoping to return to work with a fresh stock of energy and cheerfulness when my holiday is over. The other day I had a letter from a hard-working clergyman, who says: "My wife and I have been loafing royally in Venice, and I am beginning to look forward eagerly to plunging into work again." Even in the amount of work done, the time spent in having a thoroughly restful holiday is seldom wasted, for more work and work of better quality can be done afterwards.

Holidays are being considered scientifically in these days. For instance, there were more than 1,000 teachers employed in the vacation schools and playgrounds of New York City last year—teaching the children the best way of having a good time. I wonder when we shall have teachers sent around to our farms to instruct the busy workers there in the best way of enjoying a holiday, which will not be degraded into "a pleasure exertion."

But a holiday can accomplish far more than the giving of an increase of energy and freshness. We are too apt to set a high value on visible gains, forgetting the far greater importance of the invisible building of the soul, which is going on all the time. Many a mother is conscientiously working for her husband and children, wearing herself out over meals, housecleaning and sewing, and all the time drifting farther and farther away from them. She has no time to keep in touch with their interests, no time for a drive or a walk or a picnic, no time to read books which will keep her intellectually abreast of them, no time for the quiet talks in the twilight which give her an insight into their hearts and opportunity to sow seeds of loving counsel, which, if watered by earnest prayer, will certainly grow up and blossom in new beauties of life and character. Perhaps she has no time for prayer—but we can generally find time for those things which seem to us of vital importance—and so she drifts out of touch with God as well as out of touch with her own family, and so loses the power that is lying close against her hand. She lets old friendships fade out of her life because she never takes time to write friendly, chatty letters, never visits old friends, who at last grow tired of inviting her, and perhaps even forget to pray for her. Think how the richness and glory fade out of the life of such a self-made drudge—I am not speaking of those who are really forced to live a life of ceaseless toil—just because bustling Martha does not appreciate the solemn warning which draws Mary in quiet restfulness to the Master's feet: "Martha, Martha, thou art careful and troubled about many things: but one thing is needful: and Mary hath chosen that good part, which shall not be taken away from her."

One reason why invisible things are greater than visible is just that quality of everlastingness—"they shall not be taken away," because they become part of the imperishable soul. Each bright thought and holy desire is woven at once into the character, and each bitter and fretful thought injures the beauty of the temple where God should be worshipped in gladness.

We are wronging our Master when we force the outside world to suppose that He is a hard taskmaster, treating willing servants like ill-used slaves instead of like loved children. Surely it is not only rest of soul he is speaking of when He says—offering a benediction which is also a command: "Come unto Me, all ye that labor and are heavy laden, and I will give you rest."

Someone has said: "One of the best means of saving power is to rest just before getting tired. When exhaustion comes, it cannot be recovered from readily." That may sound rather like the plan adopted by the boy who sat down because he saw a fall coming, and so avoided a severe shock. If the advice were generally followed, our numerous sanitariums for nervous prostration would have to close their doors. The people who act as though life were made only for work, are like a man who exercises only one arm, and leaves the rest of his body to grow weak and torpid through inaction. God has given us intellectual power, and the love of beauty in art and nature: surely it is a sin of omission to leave these talents to rust in inaction, or die out altogether, when they might be cultivated and used for His honor and the good of our fellows. God has made us social beings and given us friends and acquaintances. If we are not too busy with material things, we may gain eternal good from contact with other souls—either in daily life of through books—and may in our turn help to uplift and brighten other lives. One who cares only about work will surely be very miserable when sickness or old age deprives him of the

power of activity. He will have no resources to fall back upon, for he has never formed the habit of conversation or meditation. The greatest thinkers and writers have usually understood the value of recreation, turning from hard brain work to gardening, riding, or other pursuits. In a crowded city district, it was once found necessary because of lack of space, to give the children only half a day's schooling—taking one lot in the morning and another in the afternoon. Much to their surprise the teachers found that the children made better progress than when they were all day in the school-room. It is often so in life. People can generally do more and better work if the hours are not too long.

It is not always possible to get a complete change of scene, but those who understand the value to body and soul of a time of restful leisure can generally find time for it, without neglecting their duty or going away from home. Indeed, if "leisure" is understood to be a "duty," and the command to "rest a while," is seen to be one which cannot be disobeyed without serious loss to ourselves and others, we must learn to "make time" for it.

God scatters quiet, everyday pleasures all round us; do not let us live in such a hurry that we have no time to stoop and pick them up.

"Why thus longing, thus forever sighing,
For the far-off, unattained and dim,
While the beautiful all around thee
Lying,
Offers up its low, perpetual hymn?"
HOPE.

NEAR HOME AT LAST.

The following is an extract from "Near Home at Last," a poem, by Rev. J. V. B. Monsell, written a week before his own happy death. At the time of writing he was seemingly in good health.

From the still hush and curtained gloom
Of the dear old familiar room
When all that round about it lies
Is full of happy memories,
When watchful love with silent tread
Steals gently round the dying bed,
And whispered accents soft and dear
Fall gently on the dying ear,
And hands the tenderest wait by
To close in faith the dying eye,
When the last dull, dim sense of feeling
Is consciousness of dear ones kneeling
Devoutly round, and breathing there
The last commendatory prayer.
Then, suddenly, to open mine eyes
And find myself in Paradise!
The Gates of Death forever past
To find myself with Christ at last;
To see that look of welcome given
Which is the very Gate of Heaven,
To feel through all my being move
That holy atmosphere of love,
And as His Hand is on me laid
Hear these sweet words, "Be not
afraid!"

I know in whom I have believed,
By whom I shall be then received,
The dignity and tender grace
Of that oft-imagined face,
The well-known and familiar voice
That made my heart on earth rejoice.
To see, as Stephen; hear, as Paul;
And then at last to see it all!
See my own Jesus standing near
And his soft, "I am Jesus!" hear.

Then when my race on earth is run,
My day of work and waiting done,
And I with tottering footsteps wend
Nearer to what men call my end,
And they in whom life's tide is high
With pitying whispers pass me by,
I ask no pity for my fate;
Nay, rather, friends congratulate,
For Home is near, and it is late!

J. V. B. M.

The Peer—Were any of your ancestors ever painted?

Had the Laborist—Yes, my grandmother had her neck painted for the mumps.—
Ally Sloper.

INGLE NOOK CHATS

THE TREASURY OF IDEAS.

1. Can woman's work at harvest time be simplified in any way?
2. Ideal furnishings for the farm kitchen, dining room, sitting-room bedroom.
3. Children and punishment.
4. Should a bachelor marry and bring his bride to a homestead before he has prepared a home?

INGLE NOOK NEWS NOTES.

You will all be sorry to hear that "Nameless" lost her home and all its contents by fire some weeks ago, and has been very ill since.

* * *

The book "Care of the Baby," recommended so highly by "Sairy Gamp," can be ordered through the FARMER'S ADVOCATE Office.

* * *

Margaret W— has been away for a holiday and sends a message to the Ingle Nook to the effect that to be appreciated at home as cook and homemaker, one should go away and leave the family to shift for themselves for a month or so. The letters will soon flood the mail asking that the visit be made shorter instead of extended, dwelling mournfully upon the hard tack and declaring the two boys are homesick for their mother.

* * *

Lively Canadian sent in a recipe for home-made vinegar, but several much the same in detail have already appeared. We hope to hear from her again on some other subject.

* * *

Your personal note, Livlaneng, got here before the other went to press and the correction was made. Thanks for your promptness. What an ingenious idea for constructing a name!

* * *

Gip kindly sent a recipe for vinegar, but wouldn't stay long because "reception chairs are disagreeable things" and this is her first call. She needn't be afraid we have none of those paralyzing abominations in the Ingle Nook—nothing but cosy corners and arm-chairs. Come and fill one, Gip, don't procrastinate.

* * *

Leeds Yorkshire Lass sends a recipe for Old Yorkshire Standard Pie and this message: "When a man has been working hard all day he wants looking after. If he gets lots to eat he will not want chewing tobacco in his mouth all the time."

THE MOTHER'S PRAYER.

I am the children's hearts' delight,
Their sun by day, their moon by night;
Their light, their warmth, and all their bliss

To be wherever Mother is.

And when I go I must cast off
Small hands constraining me in love.
And when they leave me they are sent
Into an outer banishment.

The children have me in their dreams
Between the star-beams and moon-beams;

They name me in their prayer and play;
With Mother, Mother, all the day.

I am their center of all things.

The innocent love's burnt-offerings
Laid on my altar send on high
Sweet smoke of incense in my sky.

Dear God, while they are little, see,
They love Thee, hidden, loving me,
And being too young to know indeed
Set up their mother in Thy stead.

Thou who hast willed we mothers should

Through the sweet years of babyhood
Take thy place with the children, yea,
Be God and Heaven of their small day.

Remember when Thou wast like these,
Thou Babe that lay on Mary's knees,
When all Thy Heaven was Mother's eyes
And all Heaven's music lullabies.

Thou who didst follow at her skirt,
Have pity on my low desert;
Thy proxy, vice-regent, lest I,
Unworthy of my destiny,

Show a blurred image of Thy face,
Yea, make me a true looking-glass
Wherein the children shall surmise
As darkly through a glass Thine eyes.
—*Pall Mall Gazette.*

RECIPES.

A PLEASANT SURPRISE.

Dear Dame Durden:—I was so much pleased as well as surprised to see in the Ingle Nook Chats a remedy for butter bowls cracking. I thought I would call again for some more help and now I am going to ask for a recipe for Sauer-kraut. I have a nice garden and would like to try to make some.

I hope this letter will not have the misfortune to travel as did the last one I wrote, without a postage stamp, it being accidentally dropped. I had been looking for its return when at last I saw my answer which gave me quite a happy surprise. Thanking you all and hoping some time to be of some help to someone else, wishing Ingle Nook continued success,

D. T. P.

SHOULD THE WIFE SUPPLY ALL THE TACT IN THE FAMILY?

Dear Dame Durden:—What is tact? Webster tells us that it is adroitness in managing the feelings of others dealt with. Most writers assume that it is a special gift possessed by few. Pardon me for calling attention to previous writers by remarking that when any mention is made of a lack of due consideration on the part of a husband to his wife, it is always put down to lack of tact on the part of the wife. I want to state right here that I have no more tact than a beetle, yet our home is far above the average in happiness. Indeed, I consider it is as near perfection as one can look for on earth, except that it is not a home of prayer. Is tact supposed to be entirely lacking in the formation of man? Why should not an application of tact on his part act as a lubricator of the domestic wheels? Why should it be thought manly on his part to compel his wife to carry a supply of tact to rub his angles and corners every time she meets him? Is there no inborn sense of justice in man's composition unless it is first inoculated by woman's tact and fed on increasing rations of the same? I consider it a libel on the intelligence of our present men. If I were a man I would give the lie to every such statement in no measured terms. It makes the men of my acquaintance angry to see women always condemning their sex for any domestic trouble, and they think less highly of them for doing so. I often wonder what kind of mothers those writers had, or did they never think that their father was less considerate to her than she was of him. I think we throw discredit on our mothers when we uphold, or rather condone, any action of man toward woman on the assumption that it must of necessity be the fault of the woman. I am glad I shall not be judged by the woman who upholds such views at the Great Day. I say, like David, "Let me fall into the hand of the Lord and not into the hand of those women." I know a great number of women who are my superiors in most every way and they live a miserable life. I take no credit to myself for my happy lot and I certainly do not think them in the least to blame for their unhappy lot. Neither do I think there is fault on both sides, nor that the woman alone ought to apply tact, nor be blamed if she is lacking in it.

B. S.

(You will see B. S. that I dropped a sentence from your helpful letter. The circumstances, I happen to know, were not what you imagined in that case, so I thought it best to leave it out; especially when its omission did not destroy the force and importance of the subject you bring forward for our consideration.—D. D.)



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Strawberry	Tapioca
Pineapple	Custard

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But 'tis the happy that have called you so."
—Robert Southey.

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HARVEST IN SOMERSETSHIRE.

Then the golden harvest came, waving on the broad hillside, and nestling in the quiet nooks scooped from out the fringe of wood. A wealth of harvest such as never gladdened all our countryside since my father ceased to reap, and his sickle hung to rust. All the parish was assembled in our upper courtyard; for we were to open the harvest that year, as had been settled with farmer Nicholas, and with Jasper Kebby, who held the third or little farm. We started in proper order, therefore, as our practice is: first, the parson, Josiah Bowden, wearing his gown and cassock, with the parish Bible in his hand, and a sickle strapped behind him. As he strode along well and stoutly, being a man of substance, all our family came next, I leading mother with one hand, in the other bearing my father's hook, and with a loaf of our own bread and a keg of cider upon my back. Beside us (sisters) Annie and Lizzie walked, wearing wreaths of corn-flowers, set out very prettily, such as mother would have worn if she had been a farmer's wife, instead of a farmer's widow. Being as she was, she had no adornment, except that her widow's hood was off, and her hair allowed to flow as if she had been a maiden; and very rich bright hair it was, in spite of all her troubles.

After us the maidens came, milk-maids and the rest of them. There must have been three score of us, take one with another; and the lane was full of people. When we were come to the big field-gate, where the first sickle was to be, Parson Bowden heaved up the rail with the sleeve of his gown done green with it; and he said, that everybody might hear him, though his breath was short, "In the name of the Lord, Amen!"

"Amen so be it!" cried the clerk who was far behind, being only a shoemaker.

Then Parson Bowden read some verses from the parish Bible, telling us to lift up our eyes and look upon the fields already white to harvest; and then he laid the Bible down on the square head of the gate-post, and, despite his gown and cassock, three good swipes he cut of corn, and laid them right end onwards. All this time the rest were huddling outside the gate and along the lane, not daring to interfere with parson, but whispering how well he did it.

When he had stowed the corn like that, mother entered, leaning on me, and we both said, "Thank the Lord for all his mercies, and these the first fruits of his hand!" And then the clerk gave out a psalm verse by verse, done very well; although he sneezed in the midst of it, from a beard of wheat thrust up his nose by the rival cobbler of Brendon. And when the psalm was sung, so strongly that the foxgloves on the bank were shaking, like a chime of bells, at it, parson took a stoop of cider, and we all fell to at reaping.—R.D. BLACKMORE in "Lorna Doone."

SELECTED RECIPES

PICKLED NASTURTIUM PODS.—Gather the pods on a dry day and wipe clean with a cloth. If enough cannot be found to fill a bottle at one time the pods may be added as they ripen. Place the pods in a dry glass bottle and pour over them until the bottle is full a mixture of one ounce salt and six peppercorns to each pint of vinegar. When the bottle is as full of pods as is desired, cork it well and seal with sealing wax or rosin. These should not be used for ten or twelve months.

CHUTNEY.—(Asked for by "Florence.")

No. 1.—Eighteen sour apples chopped; 1 lb raisins, seeded and chopped; 1 lb. moist sugar; 4 ounces each of ginger; onions (chopped) and salt; one-half lb. roasted mustard seed; 1 teaspoon red pepper. Cook well, bottle and seal.

No. 2.—Half a pound each of sour apples (chopped); tomatoes; salt; brown sugar; stoned raisins; 2 oz. cayenne; 4 oz. ginger; 3 quarts vinegar; 1 quart lemon juice. Mix well; put in a well covered jar; keep in a warm place, and stir every day for a month. Then strain through a cloth, but do not press; put the solid part into clean dry bottles and seal. Use the liquid as a sauce for meat or fish.

RAISIN BREAD.—3 lbs. flour, ½ lb. large raisins, 1 yeast cake, ½ lb lard, salt to taste, good handful of sugar. Stone the raisins. Put the flour, salt and sugar in a bowl, rub in the lard, then the stoned raisins. Put the yeast cake to soak in lukewarm milk or water, make a hollow in the center of the flour and pour it in, mixing some of the flour in to form a batter. Let it rise, then knead. It will require about five hours to rise after it is kneaded. This will make three small-tin loaves. They require about one hour to bake. I pull them out of the tins when they have been in about half an hour, and turn them the other side up; was bothered with them burning but put an old tin full of cold water in the oven till I had learned the why and wherefore of the stove. (Sent by Blossom.)

OLD YORKSHIRE STANDARD PIE.—Make pastry for both top and bottom of pie. Cut some bacon, both fat and lean, put inside the pie. Beat two eggs well and pour all over the meat. Add salt and pepper last and put on the top crust. By the time the crust is done the meat will be ready also, usually in about half an hour. (Sent by Leeds Yorkshire Lass.)

VINEGAR FOR SALADS.—For vinegar that is to be used at once with salads, lettuce or beets, use a teaspoon of acetic acid to a cup of water. This will not keep well enough to use for pickles but is good for immediate use. (Sent by Willow Glen.)



LORD AND LADY ABERDEEN
Who ten years ago occupied Rideau Hall.

Sour-cream Salad Dressing.—One cup sour cream, 1 teaspoon sugar, 1 tablespoon lemon juice, 1 small teaspoon salt, dash of cayenne, 3 tablespoons vinegar. Mix the dry ingredients in a bowl. Add the lemon juice, and then the vinegar. Beat till smooth; then add the cream, and set on ice till needed. Use for any vegetable salad.

To make raspberry vinegar pick out stems and leaves from the berries, then press out the juice through a thin cheese cloth or flannel bag. To every pint of juice add one pound of sugar and a quarter of a cup of vinegar (or the berries may be covered with vinegar and let stand half an hour before pressing). Boil for fifteen minutes, then put up in bottles or sealers. Fill a glass half full of the liquid, add water and the drink is ready.

Rhubarb and Orange Peel Jelly.—Cut a pound and a half of rhubarb into pieces an inch in length; sprinkle over them a cupful and a half of sugar and about a quarter of a cupful of candied orange peel; cut into tiny bits, and also a little hot water. Cook directly over the fire or cover and bake, until the rhubarb is tender. For three cupfuls of this soften one-third a package of gelatine in one-third a cupful of cold water; when well softened turn into the hot rhubarb. Harden in a mould. Serve with thin cream, flavored and whipped with an egg-beater. Garnish with figures of candied orange peel. Cook the peel in sugar and water if it is necessary to soften it.

THE FARMER'S ADVOCATE FASHIONS.

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4192—Little Girls' Dress, 8 sizes, 3 to 10 years. The above represents a very attractive little dress for hot summer weather. For cooler days it may be worn over a guimpe of muslin or chambray, with sleeves below the elbow.

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CHILDREN'S CORNER

NEW PLANS FOR THE CORNER.

Dear Boys and Girls:—Perhaps these two or three days of cool weather have had something to do with it—but I have been thinking over what we are going to do with our Children's Corner during this fall and winter. It is a good page and the FARMER'S ADVOCATE is proud of it, but it can be made better. Don't you think so?

Which kind of letter do you like best—those that tell you about one thing, a garden, a pet, a trip, an adventure when fishing or picking berries, or those that simply make a list of the number of brothers and sisters, cattle and horses and acres of land which they have? I like the first kind best and think every one else does too.

Sometimes I open a letter addressed to "Cousin Dorothy" and think I'm going to hear something very interesting because it starts off so well, but suddenly the story stops, changes off to something else and leaves me disappointed. For instance, a little girl wrote a letter that came into the office this morning and she began: "One morning when we got to school there were two little kittens where someone had left them." I was quite interested, but instead of going on with the story she dropped it entirely and told instead how many cats, dogs, cows, pigs and turkeys they had at home.

we cannot use them. If you want to do pictures that we can use get smooth firm paper without lines, a bottle of India ink and a fine pen point. Make your drawing at least three inches wide. Remember that no changes can be made on it here and if it appears it must be exactly as you send it. We cannot promise to produce all that are sent to us—only the best.

I do not often write you as long a letter as this, but you will forgive me this time.

COUSIN DOROTHY.

HOW THE TOWN GOT ITS NAME.

Dear Cousin Dorothy:—This is the month of my birthday, so I am writing you a letter. My birthday is on the 12th of July. I wonder how many more of our members have birthdays on that date? You must not take me in as a new member, for this is my third letter. I like to see new ones write better than the old ones, for the new ones make new members.

You asked us quite a while ago to tell how our nearest town got its name. Well, our town's name is Woody River. It was called Bowsman, but the parcels on coming got mixed up with another town called Boissevain, so they changed it to Woody River. Woody River is the name of the river running past our



A TRUSTY FRIEND.

And I suppose I'll never know now what those kittens looked like, how big they were, whether anybody gave them something to eat out of the dinner pail and who took them home at four o'clock. It is better to tell one thing well than to mention half a dozen things and describe none of them. Do you see what I mean, kiddies?

What are you going to do about it? Here are some of the plans I have made and if anyone thinks of some others send them in at once. For the little children who are not very old or who have not been to school very long there will be a column of their own. But if any older boys and girls write "little children's" letters they will have to go over in that column too.

Then, occasionally I shall shut my eyes and draw out a letter to be printed exactly as it was written, without correcting any errors in spelling or punctuation. It may happen to be good or fair or even poor—that will make no difference. Some other times I will draw out one and have it reproduced exactly, handwriting and all.

There are boys and girls in this Corner who can draw nicely and sometimes send specimens of their work to me, but because they are done on the wrong kind of paper and with a pencil

house. There are quite a few fish in it in the spring, but the river was so muddy this spring that we did not get any. May just brought Vera on the table and shook it so my writing is not very good.

LILY MAY METCALFE (13)
Manitoba. (a)

A NEW MEMBER FROM B. C.

Dear Cousin Dorothy:—As I was at a tea-party at my friends who keep the post office here, Laura Hagan showed me the Children's Corner in your paper, so I thought I would write you a little letter. I live on a farm of two hundred acres bordering on the Saanich Arm, which is a delightful body of water for boating. About three miles from our place is a Cement Works which runs day and night. I have many friends there as I meet them at our country school which is about a mile and a half from our house.

We have a dear dog. His name is Chum, and a little pup which has no name yet. We also have several cats; the favorite is Minnie. Good-bye Cousin Dorothy,

Your New Friend.

B. C. (a) KITTY HAGE. (12)

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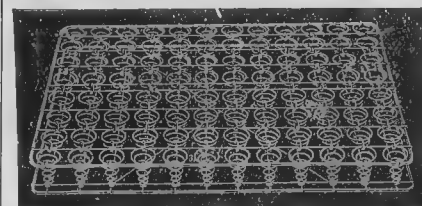
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Write me about it to-day.

Clarence W. Noble

1 Empress Bldg., Winnipeg

WHY NOT TELL US ABOUT THAT GARDEN?

Dear Cousin Dorothy:—As I have never written to you before, I thought I would write now. My father has taken the FARMER'S ADVOCATE for about three years. I like to read the Children's Corner and other parts of the ADVOCATE. I have one sister and three brothers all younger than myself. I have a vegetable garden this year. Well, Cousin Dorothy I must close my letter or I will be making it too long. I am not a very good writer, am I?

Alta. (b) GLADYS LAING. (11)

TWO LOST KITTENS.

Dear Cousin Dorothy:—This is my second letter to the Children's Corner. I go to school three miles away. My teacher's name is Miss C—. We like her fine. Our school was out the nineteenth of July. One morning, when we got to school there were two little kittens where someone had left them. We have two cats, one dog, thirty-eight cows, thirty-three pigs, and one hundred and twenty-six turkeys and two hundred and fifty chickens. We have taken the FARMER'S ADVOCATE for three years and we like it very much.

Alta. (b) EUNICE ARMOR. (10)

A RACE ON THE WATER.

Dear Cousin Dorothy:—My father has taken the FARMER'S ADVOCATE for three years. I go to school and am in grade four. My studies are arithmetic, spelling, reading, writing, drawing and composition. My teacher's name is Miss M—. We have sixteen horses, and two colts named Belle and Jim. I must tell you of a trip we had to Ninnete. We took our lunch and went down on the train in the morning, returning in the evening. It was a very pretty place for a picnic. We had a ride in a gasoline boat and ran a race with another boat of the same kind, and best of all we won.

Man. (b) EDNA M. COOK. (11)

BATHING AND BOAT RIDING.

Dear Cousin Dorothy:—I am now away for my holidays and am in the country visiting. I am very much interested in the letters the children write, so I thought I would like to write too.

There is a lake just three miles away and I go in bathing and boat riding. I gather the eggs every day and go out berry-picking. My sister, fifteen years old, passed her first part of her third year. I will take my entrance next year. The subjects I like best are grammar and arithmetic.

Man. (a) RITA VAN BLARICO. (11)

TAKE A SAW MILL FIFTY MILES.

Dear Cousin Dorothy:—This is the second letter I have written to the Children's Corner. I am going to school. We have a fine teacher. Her name is Miss D—. I and some of my brothers had the measles about a month ago. I am in the third reader. This is a very pretty country. You can see a long way. There are strawberries, some raspberries, saskatoons and choke cherries. There is plenty of wood two miles from us, dry and green wood. We have a saw-mill now and we are going to take it about fifty miles north of here to saw lumber. Hoping this letter will satisfy you, I remain, Saskatchewan. (a) AUSTIN SMYTHE. (9)

A PONY TO DRIVE.

Dear Cousin Dorothy:—My father has taken the FARMER'S ADVOCATE for two years and likes it very much. I always read the Children's Corner. My brother has a pony named Maud, and my sister and I often go out driving with her. I have two calves; they are both black. We have fifty-nine pigs and ten sheep. I am nine years old. I have been going to school about three years. My teacher's name is Miss L—. We have holidays for two months.

Manitoba. (a) ELEANOR PALAS. (9)

A SPLENDID PART OF MANITOBA.

Dear Cousin Dorothy:—I live on a farm nine miles from Boissevain town and I like farm life better than town life. We came from England to Canada seven years ago. I don't remember much about England but from what I remember I like Canada best. There is a natural bluff of trees on our farm; they are in a ravine and are very pretty. I play in them sometimes and pick wild flowers that grow there.

There are lots of berries in the bush and other places this year, and we pick them when they are ripe. The best ones are saskatoons, raspberries, strawberries, dewberries, pin-cherries, choke-cherries and cranberries. I like picking berries very much. I am always glad when the spring comes and the flowers grow, as we have lots of them and they are very pretty ones. I go roaming about over the hills after them.

One of my brothers has a homestead in Saskatchewan. He is just married and I should like to see his wife. We are three miles from school and I used to drive but I have passed into the town school. My teacher's name is Miss W—. All the scholars like her.

Manitoba. (b) MARJORIE HOLDITCH.

A DAY AT THE LAKE

Dear Cousin Dorothy:—As I saw my last letter in print I thought I would write again to see if I should be so successful. I live on a farm eight and a half miles from the town of Boissevain. We have quite a pretty place and there are lots of trees round the house. There are some pretty ravines with a coulee running through. We can bathe nearly all summer and have lots of fun. We make sand castles and have little boats which we sail down the coulee. There is a lake about ten miles from our place and a party of us went for a day. We left about half past nine; it was twelve when we got there, so we had dinner right away. My father drove a wagon-load of children. It was a lovely day and we had a nice drive. After dinner we got a boat and some of us went out in it for a row. After that we had some more rows and got some yellow water lilies. Some got strawberries and raspberries for tea.

Manitoba. (a) BETH THOMPSON. (12)

POEMS FOR RECITATION.

THE OLD STONE BASIN.

In the heart of the busy city,
In the scorching noontide heat,
A sound of bubbling water
Falls on the din of the street.

It falls in an old stone basin,
And over the cool, wet brink
The heads of the thirsty horses
Each moment are stretched to drink.

And peeping between the crowding heads
As the horses come and go,
The "Gift of Three Little Sisters"
Is read on the stone below.

Ah! beasts are not taught letters;
They know no alphabet;
And never a horse in all these years
Has read the words, and yet

I think that each thirsty creature
Who stops to drink by the way,
His thanks, in his own dumb fashion,
To the sisters small must pay.

Years have gone by since busy hands
Wrought at the basin's stone—
The kindly little sisters
Are all to women grown.

I do not know their home or fate,
Or the names they bear to men,
But the sweetness of that precious deed
Is just as fresh at then.

And all life long, and after life,
They must the happier be
For the cup of water poured by them
When they were children three.

—SUSAN COOLIDGE.

Report of Kootenay Fruit Farm which represents the cream of the land of this district.

This farm contains two hundred and thirty-four and one-half acres and is situated on the Lower Arrow Lake within one mile of Burton City. Burton City is one of the regular landing places for the C. P. R. Steamers and these boats make regular daily trips both ways between Robson and Arrowhead. Burton City has hotel accommodation, post office, stores, etc., and is situated at the mouth of one of the largest, most open, and fertile valleys to be found in the district of Kootenay. The valley in places, is over three miles wide, and the land therein is on the average fairly easy to clear, and generally speaking is free from stone. Cariboo Creek runs through the valley. This stream contains an inexhaustible supply of water for all time to come, for any demand that may be made upon it, for either household or irrigation purposes. Cariboo Creek also has several small creeks or feeders which empty into it and from which water can be flumed to any land in the valley at moderate cost. There are some fine fruit farms, gardens and orchards around Burton City, which demonstrates that the land is suitable and specially adapted for the growing of all kinds of fruits and vegetables. The two hundred and thirty-four and one-half acres above referred to has been known as the Sapandowski Farm. It was the first land taken up on the Lower Arrow Lake, and its former owner, Charles Sapandowski, picked out to our mind, the finest, richest and most level tract of land along the Lake. That the soil is very rich, there can be no doubt, as is proven by the fine, thrifty bearing fruit trees and bushes now producing upon it. The improvements on this farm consists of the following:

Forty acres cleared land, fenced, and all stumps, roots removed.

Two hundred fruit trees of different varieties all in good healthy condition.

About seventy-five of these trees are bearing now.

About one-half an acre of raspberries, gooseberries and black, white, red currants. These bushes are loaded with fruit this season.

A neat, warm and comfortable dwelling containing four rooms, also summer kitchen.

A fine well of water right at the dwelling.

Several good barns.

Fine milk storage house and several good out-buildings.

Also fine new barn in course of construction. There is enough good cedar on this farm to more than fence it into ten acre blocks.

There is about twenty acres under crop of timothy hay and the first crop will average five tons to the acre. Two crops will be taken off this summer.

Ten tons of potatoes to the acre have been taken off this place. The price realized for last summer's potato crop was from twenty-five to thirty dollars per ton.

The farm has three thousand four hundred and thirty-two feet frontage on the lake and the very finest of sandy beaches.

The balance of the land to be cleared we think could be cleared at from fifteen to thirty-five dollars per acre.

There is very little standing green wood and in most places the land is simply covered with underbrush and natural foliage.

A fine creek of mountain water runs through the property.

As a fruit farm and cattle ranch combined there is no better proposition in British Columbia to-day. The former owner made big money in cattle and at the present time, there are some twenty-five head of thoroughbred Shorthorn cattle all in the pink of condition.

Another feature in connection with this place is this. It has been surveyed off into twenty-four blocks, ranging in size from seven to sixteen acres each, and at the price the place can be bought for it leaves the purchaser in a position to retain for himself the forty acres already cleared and sell the balance at a price which net him a profit on the whole transaction of at least six thousand dollars. We are in a position to demonstrate this to a buyer. The twenty acres containing the orchard and buildings will sell readily to-day for two hundred and fifty dollars per acre. The other twenty acres will sell for one hundred and fifty and the balance for one hundred and twenty-five dollars per acre without any trouble.

Our Firm will be willing to assume the handling of this property at the above prices. The nature of the soil on this farm is such that we claim that it will not need irrigation. The whole tract is practically level and there is just enough slope for drainage. We positively guarantee to the buyers a tract of land which cannot be beaten for quality in the District of Kootenay.

Our Mr. W. J. Toye has inspected the above described land and we guarantee the correctness of this report.

In conclusion we would say that this is a good proposition for a little Colony of about 15 or 20 settlers, all of whom would get equally good land.

This farm must be sold at once and can be bought at a low price.

Write at once for price and terms.

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CONUNDRUMS.

Sent by Beth Thompson:—

1. When was the first game of tennis played?
2. If Mississippi wore Missouri's New Jersey what did Delaware?
3. Where is banking first mentioned in the Bible?

Sent by Marjorie Holditch:—

4. Can you tell me why
A hypocrite's eye
Can better descry than you or I
On how many toes
A pussy cat goes?
5. Why are you more like a carpenter than I am?
6. What did Queen Elizabeth take her pills in?

MY TASK.

To love some one more dearly ev'ry day,
To help a wandering child to find his way,
To ponder o'er a noble thought, and pray
And smile when evening falls.
To follow truth as blind men long for light,
To do my best from dawn of day till night,
To keep my heart fit for His holy sight.
And answer when He calls.
—MAUD LOUISE RAY, in *Harper's Magazine*.

A muscular Irishman strolled into the Civil Service examination-room, where candidates for the police force are put to a physical test.

"Strip," ordered the police surgeon. "What's that?" demanded the uninitiated.

"Get your clothes off, and be quick about it," said the doctor.

The Irishman disrobed, and permitted the doctor to measure his chest and legs and to pound his back.

"Hop over this bar," ordered the doctor.

The man did his best, landing on his back.

"Now double up your knees and touch the floor with your hands."

He sprawled, face downward on the floor. He was indignant but silent.

"Jump under this cold shower," ordered the doctor.

"Sure that's funny!" muttered the applicant.

"Now run around the room ten times to test your heart and wind," directed the doctor.

The candidate rebelled. "I'll sthaye single."

"Single?" asked the doctor, surprised.

"Sure," said the Irishman, "what's all this fussing got to do with a marriage license!"

He had strayed into the wrong bureau.

"Madam," said the book-agent as the door was opened by a very comely maid, "I am selling a new book on etiquette and deportment."

"Oh, you are?" she responded. "Go down there on the grass and clean the mud off your feet."

"Yes'm," and he went. "As I was saying, ma'am," he continued as he again came to the door, "I am sell—"

"Take off your hat! Never address a strange lady at her door without removing your hat."

"Yes'm," And off went the hat.

"Now, then, as I was saying—"

"Take your hands out of your pockets. No gentleman ever carries his hands there."

"Yes'm," and his hands clutched at his coat lapels. "Now, ma'am, this work on etiq—"

"Throw out your cud. If a gentleman uses tobacco he is careful not to disgust others by the habit."

"Yes'm and the tobacco disappeared. "Now, ma'am," as he wiped his brow, "in calling your attention to this valuable—"

"Wait. Put that dirty handkerchief out of sight. I don't want your book. I am only the hired girl. You can come in, however, and talk with the lady of the house. She called me a liar this morning and I think she needs something of the kind."

The Rev. R. Moseley, preaching at the Guard's Chapel recently, told a pathetic story of the late Queen. A young soldier was lying near death in one of the hospitals, and Queen Victoria visited him. The man had been in a hot fight, where bullets were flying in a terrible fashion, and he got badly hit and fell. Although suffering great pain, he managed to drag himself twenty yards and rested behind a sangar. As he lay there he saw a comrade fall, as he had done. The brave boy, with the greatest pain and difficulty, dragged himself to where his stricken comrade lay and brought him back to shelter. As the great Queen was told the story she put her hand on the arm of the soldier, and said, "Thank you, my dear son, for all you have done for me."

"What are they moving the church for?" "Well, stranger, I'm mayor of these diggins, an' I'm fer law enforcement. We've got an ordinance what says no saloon shall be nearer than 300 feet from a church. I gave 'em three days to move the church."

"From the grammatical standpoint," said the fair maid with the lofty forehead, "which do you consider correct: 'I had rather go home' or 'I would rather go home?'" "Neither," promptly responded the young man. "I'd much rather stay here."—*Answers*.

An old painter watched a little fellow who amused himself making drawings of his pot and brushes, easel and stool, and said, "That boy will beat me some day." So he did, for he was Michael Angelo.

A German boy was reading a blood-and-thunder novel. Right in the midst of it he said to himself, "Now, this will never do. I get too much excited over it; I can't study so well, after it. So here goes." And he flung the book out into the river. He was Fichte, the great German philosopher.—*Our Dumb Animals*.

Weary Willie (reading)—De qualities a woman requires in a husband are neatness, cleanliness, industry, sobriety honesty and courage!"

Battered Bachelor—T'ank heavens! I kin claim a feeling ov perfect security from the female sex!—*Chicago News*.

A stranger in New York asked a newsboy to direct him to a certain bank, promising him half a dollar for it. The boy took him about three doors away and there was the bank. Paying the fee, the man said, "That was half a dollar easily earned, son."

"Sure," said the boy; "but youse mustn't fergit that bank directors is paid high in Noo Yawk."

A mountaineer of one of the back counties of North Carolina was arraigned with several others for illicit distilling. "Defendant," asked the court, "what is your name?"

"Joshua," was the reply.

"Are you the man who made the sun stand still?"

Quick as a flash came the answer: "No, sir; I am the man who made the moonshine."—*Harper's Weekly*.

Rector (showing a stranger the church monuments)—"My grandfather has slept in this church for eighty years." Stranger—"Is he living?"

Lawson—Is he rich?
Dawson—Fabulously. Why he stayed three days once at a Florida hotel.
Somerville Journal.

"Is your family entertaining this season?" inquired the society devotee. "Well," answered Mr. Cumrox, "mother and the girls seem kind of amusing to me, but everybody else seems to take 'em seriously."—*Washington Star*

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Farmer's Advocate, Winnipeg, Man.

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U.S. GETS ALL the CREAM

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Marshfield, Vt., Feb. 2, '07.

I bought one of the—machines, but after running it a little while I found it was not skimming clean. I had it tested at the creameries here and found it to test 1 per cent, and I could not stand this so exchanged it for one of the U. S. machines, and find that if I had given the other machine away I should have made money by so doing. I like the U.S. very much.

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QUESTIONS AND ANSWERS.

LAME MARE.

Mare is lame in left foot or shoulder. Sometimes she will drive for miles without showing anything wrong and at other times she is lame, especially when you attempt to turn her short. Would she be all right for breeding?

A. B. M.

Ans.—The trouble must be located before treatment can be recommended. The irregular lameness indicates navicular trouble, while the difficulty in turning indicates trouble in the shoulder. I am of the opinion the trouble is in the foot. I would advise you to take her to your veterinarian and have her examined and the lameness located. When once located, blister the parts as recommended for F. W. A.'s mare in this issue. The lameness will not prevent her breeding; but if the trouble is navicular, the foals are liable to inherit a predisposition to the disease. At the same time, I think if I owned her I would take chances on that and breed her, if she is a good mare except for the lameness.

WINDGALL.

Aged horse is lame in front. Have examined him, and can find nothing wrong; but has windgalls. Have blistered them twice; had him shod, and he seems worse. Rests with toe on ground, knee bent; when turning around, appears stiff; when travelling, stumbles; goes easier on soft ground.

SUBSCRIBER.

Ans.—Windgalls do not often cause lameness, and we would advise a thorough examination in this case to ascertain if the lameness is not due to some other cause. The treatment for windgalls or windpuffs is bathing with cold water and salt for half an hour every evening, then bandage, leaving this on for a couple of hours. Then apply liniment, made up as follows, and well rubbed in: Two ounces spirits of turpentine, one-half ounce sulphuric acid poured slowly into the turpentine, the bottle being turned sideways; take four or five minutes to pour this in. Then add two ounces methylated spirits of alcohol, poured in slowly, and, lastly, cider vinegar enough to make a quart, and shake well, when it is ready for use. If this does not effect a cure, blister with iodine liniment, consisting of one dram of iodine crystals to sixteen ounces water, and repeat two weeks later.

MAMMITIS.

Last year my cow that had been milking for a month came home with one quarter of the udder swollen, hard and sore, and she gave very little milk out of it. Next day another quarter was swollen, and later the whole udder. My veterinarian treated her, but it was over a month before she recovered, and she gave very little milk out of one teat. I am letting her go dry, as she will calve again in September. To-day, another cow has her udder swollen the same way.

1. What is the cause?
2. What is the treatment?
3. Will No. 1 be all right this year?

J. B.

Ans.—1. Mammitis is caused by injuries, irregular or unskilful milking, wading through cold water, sudden changes of temperature, etc., and in some cows there is an hereditary or acquired predisposition, and the trouble appears without appreciable cause. This is especially the case in cows with tubercular trouble in the udder.

2. Purge with 2 lbs. Epsom salts and 1 ounce ginger. Feed lightly. Give 4 drams nitrate of potassium twice daily for a few days. Apply heat to the udder in the form of poultices, or bathing, draw the milk or fluid off several times daily, and, after milking, rub well with camphorated oil. When more than one quarter is involved, it is well to suspend the udder with a suspensory bandage, fastened over her loins. Injecting the quarter with oxygen or sterilized air, as in cases of milk fever, gives good results.

3. It is not possible to say, as she is liable to another attack.

CALF BLOATING: CATTLE SCOURING.

1. I am feeding a calf in the stable on good strong meal, and he bloats; not very often, but occasionally. The meal is always soaked a meal ahead, and I generally notice him bloated at night, that is, after drinking at noon; never bloated in the morning. What is the cause, and is salt effective as a preventive?

2. Last spring I applied some sheep dip on a steer's back to kill lice, and the consequence is that the hide is spoilt. What can I apply to help the hair to grow and remove scurf?

3. What will prevent cattle scouring when shipped or at time of showing, or previous to showing. What can be given them to check it?

SUBSCRIBER.

Ans.—1. This is evidently chronic indigestion, the result of feeding too much wet meal. It is a mistake to wet meal or feed it in milk. The meal should not be strong, and should be fed dry. Ground oats and bran are safest, and some successful calf feeders prefer to feed oats unground. The mixing of saliva with the food in the process of mastication aids digestion and ensures good health. Salt kept where the calf can take it at will, but not in the feed manger, except in a separate compartment, is helpful. Give sufficient Epsom salts to purge, say 4 to 6 ounces, according to age. Add to the milk one-quarter its bulk of lime water made by slacking a lump of lime in a pail with a little water, then filling the pail with water and let stand. The clear water on top is lime water.

2. The solution was no doubt stronger than the directions called for, or it would not have the effect mentioned.

3. Prevention is better than cure. Feed only hay for a day or two before shipping, and start to station on an empty rather than a full stomach. When at the show, start on hay alone, and feed meal with bran, dry, a little at first, increasing gradually, being careful to not overload the stomach with either feed or water. Dry bran alone will often stop scours, while wet bran has the opposite effect.

THOROUGHPIN.

I have a filly which has had a thoroughpin for seven weeks. Kindly tell me how to take it off

A. J.

Ans.—Apply Churchill's tincture of iodine with a stiff brush, once daily, till it blisters. Apply again in two weeks.

STORING ONIONS FOR WINTER: ITCHINESS IN HOGS.

1. What is the best way to keep onions through the winter without rotting?

2. What would be the best preparation to put on pigs that have something that keeps them rubbing on fences, etc.?

A SUBSCRIBER.

Ans.—1. The winter storing of onions is always attended with more or less loss, and most growers, we believe, prefer to dispose of the crop as soon as possible. For storing, the bulbs should be well matured, thoroughly cured, not bruised, and in a dormant state. Most growers prefer topping them before storing. Sheep shears may be used to advantage, leaving about an inch of the top extending above the bulb. Sorting may be done by hand or by means of a screen, the rods or slats of which diverge, letting the bulbs fall into three hoppers, separating the grades. Onions should be kept in a cool, dry place. They will stand quite a little frost without much injury, but if frozen and thawed several times, they become soft and do not keep well, but start to grow very quickly. Green, in "Vegetable Gardening," says the best way of keeping them is in a cold, dry room, in slatted bins, or on shelves so arranged that the air can circulate through them. A practical plan is to put them in barrels without heads, having holes in the bottom and sides, and pile these barrels on top of one another, two tiers high, first putting down scantling, or other material, to allow the air to circulate around and under them. Another way of keeping onions is to freeze them solid in autumn, and keep them so all winter. A good way to do this is to lay them eighteen

"WHAT IS DYSPEPSIA?"

There is no form of disease more prevalent than dyspepsia, and none so peculiar to the high living and rapid eating of the present day mode of life.

Among the many symptoms are: Variable appetite, faint, gnawing feeling at the pit of the stomach, with unsatisfied craving for food; heartburn, feeling of weight and wind in the stomach, bad breath, bad taste in the mouth, low spirits, headache and constipation.

BURDOCK BLOOD BITTERS

will cure the worst case of dyspepsia, by regulating the bowels, and toning up the digestive organs.

Mrs. Geo. H. Riley, West Liscombe, N.S., writes: "I suffered for years from dyspepsia and could get no relief until I started to use BURDOCK BLOOD BITTERS. After I had taken three bottles I was completely cured and can eat anything now."

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HOW LIVERYMEN CURE COLIC

At this season of the year all horses are subject to colic, which is due to a number of causes, as explained in the Veterinary Book, which is sent free to all stock owners by The Hackney Stock Book Co., of Winnipeg.

The following letter shows what liverymen use to cure colic:

Tyndall, Man., June 26, 1907.

Gentlemen,—I didn't suppose I could sell Hackney Colic Cure here, but Mr. Vincent, the liveryman, asked me to get some for him. He says it is a good remedy.

CHARLES JOHNSON.

A fifty cent bottle of Hackney Colic Cure may save your horse at any time, and it is not safe to be without it. If your dealer does not carry the Hackney Colic Cure ask him to get it for you. Don't put off until your horse is dead.

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We have received
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Best in the World!

Write me for information. I know
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If you are doing an Agricultural,
Ranching or Commercial business,
advertise in the Farmer's Advocate.

inches thick on the floor of a loft, and
cover with a foot or so of hay. Thus
arranged they will not freeze until
severe weather sets in, and then they
will remain frozen until spring. They
should never be handled when frozen.
After thawing out they will not keep
well, and should be disposed of at once.

2. Try one of the advertised sheep
dips and cattle washes, or grease, with
a mixture of lard and coal-oil

OBJECTIONABLE COLOR MARKINGS.

I ordered a purebred Yorkshire pig,
and was sent one which had some five
or six black spots on the skin, also two
patches with quite a few black hairs. If
it was bred from purebred stock should
it have these marks, or should it be
white in skin as well as hair? J. M.

Ans.—Any of the white breeds of pigs
are liable to occasionally throw stock
having some dark blue spots on the skin,
which do not disqualify them, and cer-
tainly do not impair their usefulness.
These are probably what our correspon-
dent calls black spots; but black hairs
should not appear to any considerable
extent in a Yorkshire or any of the
white breeds, and such should not be
shipped on a mail order without being
mentioned in the description.

DUCKS DYING.

I had 25 incubator-hatched duck-
lings, which seemed to be healthy when
hatched, but about one has died every
night, until there are only eight left.
Owing to feed being scarce, the only
meal I can get is oat and barley chop.
I mix this with skim or buttermilk and
sand. I had them in a brooder for a few
days, but now have them in the house
by the stove. Before dying, they let
their heads fall on their backs, and lie
this way for quite a while. C. C.

Ans.—If our correspondent will open
one of his ducklings and see if its gizzard
is jammed with sand, it would give us
further light on the subject. Of course,
barley chop and oat chop are not very
good duck food. What we desire in a
duck mash is a mixture of corn meal,
bran, oatmeal or shorts, or low-grade
flour and animal meal. As the large
duck ranchers put it, corn meal is the
basis, and enough shorts or flour is used
to make the mash sticky. Bran is used
as a filler. Then feed from 25 to 40
per cent. of green food. Our corres-
pondent is using buttermilk, and hence,
would not need to use beef scrap. We
would suggest that these ducks be kept
where it is shady. Their actions before
death would indicate that they got a
little too much sun, but we are not posi-
tive of this. Ducks require shade, and
will fatten much faster in a cool place
than where it is warm.

THE IMPROVEMENT OF IRISH CATTLE.

In the course of his interesting memo
to the recently issued report of the
Committee of Inquiry into the Depart-
ment of Agriculture, the Hon. John
Dryden, the well-known Canadian live
stock and agricultural expert, reviews
instructively the various schemes at
present in operation for the improve-
ment of Irish live stock. His remarks,
as follow, with reference to cattle breed-
ing, are especially worthy of note:

The scheme devised, I understand,
was first put in operation by the
Royal Dublin Agricultural Society, only
on a much smaller scale. It con-
sists of a bonus, or premium of £15 per
annum, as it is called, given to some
farmer selected by the Committee on
condition that he gives to his neighbors
the use of the bull for forty cows at one
shilling each. Nearly one thousand of
these bulls are placed in the different
counties this year. Those at present in
use are not sufficient to cover every part,
but the influence must rapidly widen
and very soon make a distinct improve-
ment on the annual output. A large
percentage are Shorthorns, with a few
Polled Angus, Hereford, and Galloway,
the latter being used in the poorer dis-
tricts. If care be taken in the selection
of the bulls, the milking qualities can be
preserved, while the output of beef will
be vastly increased in value.

A strong feeling is prevalent among
many of the farmers that they should
be allowed to use cross-bred bulls of
approved type in addition to the pure-

bred or registered bulls, to which they
are now confined. They base their
appeal upon differing statements as
follows:

(1.) The difficulty now experienced
in securing a sufficient number of satis-
factory registered animals owing to the
present excessive demand.

(2.) The very high prices of the best
pedigreed animals, placing them entirely
beyond the reach of the majority desir-
ing improvement.

(3.) If graded bulls could be encour-
aged, they would displace the inferior
scrubs now extensively used, and prepare
the way for the registered pedigree
bulls.

(4.) The total number of bulls avail-
able for selection for a premium would
be greatly increased.

I am free to confess that this pre-
sentation of the case calls forth my
sympathy, and I think is worthy of
being considered. The carrying it out
is, however, beset with numerous diffi-
culties which will appear to most persons
entirely insurmountable. To select for
service an unregistered cross-bred bull,
without regard to his breeding, even
though he presented a good appearance,
might lead the owner backward and not
forward. On the other hand, non-ped-
igree bulls might be found tracing back-
ward through a number of well-formed
individuals of really good breeding,
especially on the side of the sires. Bulls
sired by registered bulls, and out of
these well-bred though unregistered
cows, would be a vast improvement on
the inferior scrubs, with neither breed-
ing nor proper conformation, now com-
prising the vast majority in use in Ire-
land. But how could such selection be
effected? I fear the officers of the
Department would shudder at the
thought of attempting it. It could only
be done by a personal examination of the
different individuals, and a considera-
tion of the breeding in each case. A
pedigree is valuable, not merely because
it is registered in the Herd Book, but
because it reveals in the ancestry a con-
tinuous line of superior individuals,
which guarantees a prepotent power to
transmit the good qualities shown to
every descendant. Such prepotency
may be found in families never yet
accepted for registration, and the con-
trary is also true; that it is not always
seen in those accepted in and shown in
the Herd Book.

To encourage the use of non-ped-
igreed bulls indiscriminately would, in
my judgment, be ruinous in the extreme.
Only those carefully bred for several
generations should in any case be
encouraged. These, after inspection,
might be accepted for registration in
a special record arranged for the purpose
with the view of allowing the use of
sires of such breeding when a definite
stage has been reached, provided the
quality of the individual would warrant
it.

These sires would naturally be less
expensive, and might call for a smaller
premium, and, if desirable, be designated
for special districts, but always, as at
present, subject to a rigid inspection as
to quality, substance and constitution.

If I were guiding such an inspection,
especially of Shorthorn grades, I would
insist on the milking qualities being
kept prominently in view, with the idea
of encouraging the greatest combined
production of milk and beef possible.
A beef animal without milking prop-
erties is entirely unsuitable to the major-
ity of farmers in Ireland, however well
they may answer on the ranching areas
of other countries.

The above is the only plan which
presents itself to me by which it would
be safe to depart at all from present
methods. Whether it is worth while
thus to stimulate the grading up of the
best among the present herds of non-
pedigree cattle, I must leave for the
decision of those in authority. If it
could be done, it would prove the
highest incentive to reserve in individual
herds the choicest females, and thus
gradually bring them to a much higher
standard. Since my last return from
Canada, I have been informed that the
Department has already set in motion
an inspection and registration along
the lines here presented.

Ten Acre Blocks

Kootenay Fruit Lands

We are placing on the market a part
of the well-known BOURKE RANCH,
situated on the west arm of the Koot-
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Price \$125.00 per acre

Terms half cash, balance in two equal
annual instalments.

The soil is the finest grade of fruit
soil. The location is perfect and the
price is remarkably low. There are
only SEVEN (7) blocks, as but seventy
acres have been included in the sub-
division.

If you are interested, write us.

KOOTENAY LAND AND INVESTMENT CO.

Fruit Lands and Real Estate,
P.O. Box 443 NELSON, B.C.

KOOTENAY LAKE Fruit Lands

CHOICE fruit lands in blocks of 5, 10,
15 or 20 acres, conveniently situ-
ated near the city of Kaslo, B.C., with
all conveniences of a good town, daily
transportation, mail, etc.

Fruit growing is a very profitable in-
dustry, and the finest fruit is grown at
and near Kaslo. Our fruit took district
prize in 1906.

Ideal situation, with fine climate,
boating fishing and hunting.

We will make selections for you, if
desired, and if you are not satisfied after
examination of the land, we will refund
your money.

We have large blocks suitable for
colonization purposes.

A. J. CURLE
KASLO, B.C.



Mr. Farmer

This means YOU. Your family
NEED a Red Cross Sanitary Closet
this winter, and it is up to you to
write us for full particulars.

Any house can have one, and we
know you want to be comfortable.

"Nuf said"

Write for Catalogue

**Red Cross Sanitary
Appliance Co.**

Winnipeg, Man.

WANTS & FOR SALE

Advertisement will be inserted under this heading such as Farm Property, Help and Situations Wanted, and miscellaneous advertising.

TERMS—Two cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

FOR SALE—British Columbia. Ranches, farms, and fruit lands adjoining city of Kamloops; blocks of ten acres up; river frontage; produces peaches, apricots, plums, grapes, melons, tomatoes, which never fail to ripen; unlimited markets; terms easy. Apply Strutt and Nash, Kamloops, B. C. 21-8

BELLEVUE YORKSHIRES.—Over 100 head of spring pigs on hand. See previous issues for breeding, etc. Nothing pays better than good stock, well looked after. — Oliver King, Wawanesa, Man. T.F.

FOR SALE—1½ miles from Laurier station on the C.N.R. main line, quarter section, about fifty acres broken. House, stable and other outbuildings. Fenced with two barbed wires on tamarac posts. Snap at two thousand dollars. This land is first-class and can all be broken, no stones, scrub, or swamps. We have also half section one mile north from this farm, no improvements, some scrub, about half clear, can all be broken. All land at Eight Dollars an acre. Terms arranged. Thordarson & Co., Ashdown Blk., Winnipeg. 3-7—T.F.

WHEN REPLYING to advertisements on this page mention the FARMER'S ADVOCATE.

FOR SALE.—Barred Rocks, Leghorns, Geese, Turkeys Indian Runner Ducks, Rabbits, Pigeons; also improved Ranch. Geo. D. J. Perceval, Priddis, Alberta. 18-9

FOR SALE.—Two first-class Angus Bulls, registered in American Herd Book. Also one car lot of cattle, mostly coming 2 yrs old. These cattle are Angus grades and will be sold right. For particulars apply to P. Hay, Lintharthen P. P. Manitoba. 4 9

FOR SALE—Italian Rees, L. J. Crowder, Portage La Prairie, Man. 18-12

EXCHANGE. Do you want to exchange your farm, stock and implements for Winnipeg property. If so, write Thordarson & Co., Ashdown Block, Winnipeg. T.F.

FOR SALE—Half-section of first-class land in good agricultural district. One hundred and fifty-five acres under plow. Wood and water on place. Buildings fair. Will sell either or both quarters at twenty dollars an acre. Apply G. T. Slade, Berton, Man. 14-8

FOR SALE—Scotch Collie pups, \$10 apiece l.c.b., now ready, apply early to J. K. Hux, Rodney, Ont. E.O.T.

WHEN REPLYING to advertisements on this page mention the FARMER'S ADVOCATE.

POULTRY and EGGS

Rates—Two cents per word each insertion. Cash with order. No advertisement taken under fifty cents.

FOR SALE.—600 breeding birds for sale at a sacrifice. Twenty-eight varieties of chickens, forty varieties of pigeons. Write now. A. Guilbert, Letellier, Man.

W. C. TAYLOR, Dominion City—Barred Plymouth Rocks, Buff Cochins, Black-breasted Red Game, Eggs for setting.

AT MAW'S Poultry Farm, Parkdale Post Office near Winnipeg. Acclimatized utility breeds, turkeys, geese, ducks, chickens, incubators and poultry supplies. Large catalog mailed free.

W. F. SCARTH & SON'S S. C. Buff Orpingtons. Eggs from carefully selected hens mated with first prize cock, Manitoba Poultry Show, 1907, \$2.00 per 13. Box 706, Virden

WHEN REPLYING to advertisements on this page mention the FARMER'S ADVOCATE.

CHOICE SINGLE COMB Snow-white Leghorn eggs from carefully selected pens of choicest matings. Bred for heavy layers and typical beauty. Testimonials report excellent hatches. Selected eggs reduced to \$1.50 per setting. Good hatch guaranteed. Orders filled promptly. Honest dealings. G. Norman Shields, 29 Close Ave., Toronto, Ont. 22-9

BARRED ROCK Eggs from carefully selected pens of choicest matings. Leading strains of America. Selected for their choice barring and heavy laying of large brown eggs, and headed by cockerels, vigorous, blocky, and beautifully barred. I expect grand results from my Barred Rocks this season. Testimonials report excellent hatches. Eggs carefully selected from choicest matings reduced to \$1 per setting or \$1.50 per two settings. Good hatch guaranteed. Orders filled promptly. Honest dealings. G. Norman Shields, 29 Close Ave., Toronto, Ont. 22-9

C. W. ROBBINS, Chilliwack, B. C., breeder of laying strain Buff Orpingtons. 18-9

Lost, Strayed or Impounded

This department is for the benefit of paid-up subscribers to the FARMER'S ADVOCATE, each of whom is entitled to one free insertion of a notice not exceeding five lines. Notices exceeding five lines will be charged two cents per word for each additional word, payable in advance.

LOST.—Dapple grey gelding, white face, branded half circle over + on left hip and 8 on back near withers. Reward \$5.00. C. Calhoun, Crossfield, Alberta. 21-8

STRAYED—from five miles North of Ponoka, Iron Grey Horse, branded H on left shoulder; Black mare, indistinct brand; Dapple Grey mare. All unbroken and heavy weight. \$25 reward. F. D. Warren, Ponoka, Alberta T. F.

Breeders' Directory

Breeder's name, post-office address, class of stock kept, will be inserted under this heading at \$4.00 per line per year. Terms cash strictly in advance. No card to be less than two lines or more than three lines.

POPLAR GROVE HEREFORDS, A number of young cows, heifers, and bulls now for sale from this famous herd at low prices. J. E. Marples, Deleau, Man. Buff Orpington Eggs.

A. & J. MORRISON, Glen Ross Farm, Homewood, Man., Clydesdales and Shorthorns.

JAMES WILSON, Grand View Stock Farm, Innisfail, Alta.,—Breeder of Shorthorns.

H. H. KEYS, Pense, Sask.—Aberdeen-Angus Cattle and Buff Orpingtons Chickens for sale.

A. J. MACKAY, Wa-Wa-Dell Farm, Macdonald, Man., breeder of Shorthorn Cattle and Leicester sheep.

O. KING, Wawanesa, Man.—Breeder of Yorkshires, Barred and White Rock Powl and Toulouse geese.

MERRYFIELD FARM, Fairview, Thos. Brooks, breeder of Clydesdales and Shorthorns. Box 134, Pense, Sask.

CLYDESDALES, Shorthorns and Tamworths, T. E. M. Banting & Sons, Banting P. O., Man. Phone 85, Wawanesa. Exchange.

STRONSA STOCK FARM—Well-bred and carefully selected Shorthorns and Berkshires David Allison, Roland, Man.

SHETLAND PONIES and Hereford Cattle, finest in Canada. Write or come and see them. J. E. Marples, Poplar Grove Farm, Deleau, Man.

JOHN GARDHOUSE & SONS, Highfield P. O. Ont.—Breeders of Scotch and Scotch-topped Shorthorns, Lincoln and Leicester sheep and Shire horses.

R. A. & J. A. WATT, Salem, Elora Station, G.T. and C. N. R. R.—Champion herd of Toronto and New York State Fairs, 1905, also Grand Champion females, including both Senior and Junior Honors at both fairs. Write your wants.

BROWNE BROS., Ellisboro, Assa.—Breeders of Polled Angus cattle and Berkshire swine. Stock of both for sale.

BERKSHIRES.—Gold Medal Herd, Neepawa, Manitoba. Address, J. A. McGill.

WOODMERE FARM.—Clydesdales, Shorthorns and Yorkshires. Pigs at 8 weeks, f. o. b. Neepawa, \$8 apiece. S. Benson. 23-1

GEORGE LITTLE, Neepawa, Man.—Shorthorns of best Scotch type.

IF YOU ARE in need of anything, search the advertising columns. You will find it in the FARMER'S ADVOCATE.

CLYDESDALES.—a choice collection of breeding stock always available. Jas. Burnett, Napinka, Man.

ASHCROFT, W. H. NESBITT, Roland, Man. Clyde and Hackney mares and Stallions, work horses in car-lots, Ayrshires. Our motto, Live and let Live.

Trade Notes

SWEET REST. When we stop to think that one third of our lifetime is spent in bed, it is easy to understand why the visitors at the Exhibition took such a deep interest in the manufacture of the famous HERCULES spring bed, made there by the Gold Medal Furniture Company of Winnipeg. The invention which this company is making promises to make this third of every lifetime easy and comfortable. Everyone who has had any experience with the ordinary spring bed knows its proneness to sag, after usage, much to the discomfort of the occupant. This invention overcomes that difficulty in a practical manner, and the public were able to see the way this Hercules wire fabric is constructed. After weaving the ordinary weave, they interlace the opposite way, with coppered wire, which succeeds in multiplying the strength of the spring five times without decreasing its resiliency. The wires woven in opposition to each other into the cloth lock against each other, which makes it impossible to sag. The Hercules springs are sold by all furniture dealers and their thirty days' free trial protects every one who buys, so look for the name on the frame, and the makers' Guarantee. Accept none but the Guaranteed kinds, if you want solid comfort and sweet repose. This firm manufactures a full line of mattresses, pillows, steel folding stretchers and child's folding cribs.

THE FARMER EVER SEEKS to make two blades of grass or two heads of grain grow where one grew before, and here the question of labor often becomes acute. His land must be fitted to do two things; it must furnish a home for the plant, where its roots can take hold, and it must provide nourishment for the growth and fruition of the plant. For the latter purpose, especially, the farmer must aid nature by a supply of fertilizer. There are all sorts of fertilizers, natural and unmanufactured, but that upon which the greatest reliance is placed and from which the most desired results are obtained, is barn-yard manure. The common way of applying this is to load it upon a wagon, haul it to the field, and scatter it upon the surface with pitch-forks, wielded by hand. This process is slow and laborious. It requires severe physical exertion, and when the laborer is careless or skirks, the result is inadequate. An apparatus that shows how one man and two horses can do the work formerly requiring five men and ten horses, and do it better, is a prominent feature of the International Harvester Company's exhibit in the States building at the Jamestown Exposition. It is examined critically by the hundreds of farmers who come from all parts of the country, and the verdict of approval is unanimous. Simplicity obtains in the design and operation of the apparatus. A single lever controls the mechanism, a vibrating rake levels the load, a cylinder with long, square teeth pulverizes the material. The distribution is done by an endless apron. A large sprocket on the rear axle furnishes power to a heavy drive chain that turns the cylinder and operates the apron. The sprocket is controlled by a clutch, operated by a

lever close to the driver's hand. The apron drive feed is always under eash control of the driver, who can at will regulate the quantity required. A bright boy who can drive the team can operate the spreader as well as a man. The spreaders are equipped at will with hitches for two, three or four horses. There is a 6,000 acre farm in North Dakota where ten of these spreaders are kept busy in seeding time. This is a striking recognition of the machines value when large acres are cultivated.

WOULDN'T BE TAKEN IN.

"There are still a few honest men left in the world," said J. J. Hill, the financier, at a banquet. "It is well to be cautious, but we should not suspect everybody. If we are too suspicious we make ourselves absurd."

"I worked in St. Paul in my youth, and they still tell there about an old farmer and his wife who started for St. Paul on a visit."

"Before the couple set off they were cautioned repeatedly by their friends to beware of the St. Paul sharpers. They replied that they would keep their eyes open. And they started on their journey with a nervous determination to look out for sharpers and confidence men."

"Well, on the way the old farmer got off at a junction to buy some lunch, and the train went off without him. It was a terrible mishap. The last he saw of his wife she was craning out of the car window shouting something reproach-account of the noise of the train."

"It happened that an express came along a few minutes later. The old farmer boarded the express and beat his wife to St. Paul by nearly an hour."

"He was waiting for her at the station when she arrived. He ran up to her and seized her valise."

"Well, Jane," he said; "I am glad to see ye again. I thought we was separated for good."

"But the old lady jerked the valise from him, indignantly."

"No, ve don't, Mr. Sharper," she cried; "I left my husband at the junction. Don't be comin' any of yer confidence tricks on me, or I'll call a policeman."

FAMOUS BOYS.

A woman fell off the dock in Italy. She was fat and frightened. No one of the crowd of men dared to jump in after her; but a boy struck the water almost as soon as she, and managed to keep her up until stronger arms got hold of her. Everybody said the boy was very daring, very kind, very quick but also very reckless, for he might have been drowned. The boy was Garibaldi and if you will read his life you will find these were just his traits all through—that he was so alert that nobody could tell when he would make an attack with his red-shirted soldiers, so indiscreet sometimes as to make his fellow-patriots wish he was in Guinea, but also so brave and magnanimous that all the world, except tyrants, loved to hear and talk about him.

A boy used to crush flowers to get their color, and painted the white side of his father's cottage in Tyrol with all sorts of pictures, which the mountaineer gazed at as wonderful. He was the great artist, Titian.

'How would you like to have your steak, sir?' asked the waiter who had taken the order nearly half an hour before.

"Very much, indeed," quietly replied the patient patron.—Philadelphia Press.

Questions and Answers

TO KILL LICE ON CATTLE.

1. Sulphur rubbed well into the hide is a sure remedy.
2. Wash the cattle well with a mixture of chewing tobacco and water, one plug to one pint of water. Boil the two; then apply when warm with a rag or sponge. Sure cure. Both by experiments.

A SUBSCRIBER.

NAVICULAR DISEASE.

Mare is lame in fore leg; sometimes worse than others. She is worse when she is worked. She is getting worse. I can find nothing wrong with her foot. The top of the shoulder of lame limb is lower than its fellow.

F. W. A.

Ans.—All symptoms point to navicular disease, the lameness of which is in mostly all cases irregular, as in your case. It gradually gets worse until lameness is constant. The falling away of the muscles of the shoulder is due to want of function from the mare resting the foot. It is very hard to treat a case of this kind and in advanced cases a permanent cure cannot be made. She must have rest. Remove shoes. Give comfortable box stall. Clip the hair off all around the hoof for two inches high. Get a blister composed of two drams each biniodide of mercury and cantharides, mixed with two ounces vaseline. Tie her head so that she cannot bite the part. Rub the blister well in once daily for two days. On the third day wash off and apply sweet oil. Let her loose in stall now, and oil every day. As soon as the scale comes off, which will be ten to twelve days, tie up and blister again, and after this blister once every month as long as you can give her rest. In some cases, horses get practically useless from this trouble, and all that can be done is to get a veterinarian to perform an operation called neurotomy.

V.

HOMESTEADS: LINE FENCE.

Could I sell my homestead in Alberta and take one up in Saskatchewan or can I buy land at \$3 an acre in Saskatchewan?

A & B have adjoining farms. A lives on his, B does not. Can A compel B to put up his share of the line fence or if A puts it up can he make B pay for it, or if A has a deal on with B, can he hold back part of the money due B?

Alta.

K. J. H.

Ans.—No, once you have obtained your patent you are not entitled to another homestead of Dominion Government lands. There is some land in Saskatchewan that can be had for \$3 per acre, but that is its value. Mr. Oliver's Bill to make vacant lands on odd sections available at \$3 or other normal sums per acre has not yet become law.

2. A can build the fence and then if B ever makes use of it to enclose stock A can collect cost. Otherwise A has no claim upon B.

REMOVING ODOR OF SKIN.

Will you tell me through your paper if there is any way for removing the smell from a wolf skin which has been tanned and is being used for a mat?

J. H. H.

Ans.—We do not know of any. Perhaps some of our readers could tell.

HIRED MAN AND AGREEMENT.

I hired a man from April to September for \$30.00 a month and we have writing between us that either party can cancel this by giving eight days' notice and for good reasons. Now, my hired man told me this morning that he would quit me next week and when I asked him what reason he had to leave me, he said he had none, but I see he leaves me to get higher wages, as we have to pay \$40 and \$45 a month now for a man. Now, what have I to do? I told him that he would have to find another man to work in his place and he says he won't. If I hire another one and cannot get him for less than \$40.00 a month, can I deduct the \$10.00 more from his wages? He wants to be paid when he leaves me.

Lorne Mun., Man.

J. P.

Ans.—If your agreement says that either party upon cancelling shall give reasons and your man does not give any, then you would be justified in deducting or in taking other severe measures, but if the clause relating to reasons is not in the contract then the man is within his rights and if you protested he would be able to show a court

that an increase in wages was a good reason for leaving. You cannot compel him to supply another man. Your only recourse is in the wording of the agreement and if our explanation is not clear you should get a solicitor to advise you.

MUSIC SCHOOL.

Could you give me the address of a music correspondence school?

Sask.

P. F.

Ans.—No, we are not aware of it being taught by correspondence.

SILVER FOX SKINS.

What is the skin of a silver fox worth that is shot in July?

Sask.

A. C.

Ans.—A skin taken at this time of the year is not worth a great deal and when taken in the winter they range in value from \$10 to \$250. The fur companies advertising in our columns would give full value.

SHEET IRON GRANARIES.

Can you tell me where I can get sheet iron granaries for grain bins?

I would also like to hear from farmers through your paper who have used them, as to what success they had and what size is the best to use.

N. N.

Ans.—The iron works companies at Brandon, Regina and other towns make these articles on order.

INDIGESTION: COLIC.

1. Horse, nine years old, got loose and went out during night; ate probably green wheat and green oats in field; was in the morning turned out to pasture; was found at 7 p.m. lying down. I made him get up, but soon found out that he was trying to urinate without success. Died 24 hours afterwards. What would have been good for him? Vet. not on hand; arrived only 6 hours before death.

2. Mare, ten years old, accustomed to oat sheaves, was given while away from home whole oats at night; next morning was found lying down in stall suffering. Every time I made her get up soon after she would lie down again. Doctored her the best way we could with help of neighbors. In your answer please deal with the different kinds of colics: flatulent, spasmodic, and others and give symptoms, causes and cures.

3. One of my neighbors has a horse with bots or pin-worms. Please prescribe. Another one lost a horse last week and in opening him found the stomach practically all eaten up and about one quart of bots. Please prescribe in both cases.

Warman, Sask.

R. M. E. P.

Ans.—It is difficult to answer your questions under separate headings, for the causes, symptoms and treatment are so nearly alike that it is useless to describe them separately. I consider your horse has been suffering from indigestion caused by overloading the stomach, causing a suspension of digestion. Then fermentation and decomposition take place and unless relieved serious results will follow. Nearly all the so-called colic cases are indigestion, either acute or chronic. One of the symptoms you mention is stretching out as if to urinate. This is a symptom of indigestion. Put the animal in a good roomy loose box or paddock where he can have a good roll and give raw linseed oil, 1 pint; turpentine, 2 ounces; fluid extract of belladonna, ½ ounce to 1 ounce according to the size of the animal; or if possible give a ball composed of Barbadoes aloes, 3 drams; carbonate of ammonia, 3 drams; extract of belladonna, ½ to 1 dram; and repeat in two hours. If no relief apply mustard to abdomen and follow up with injections.

Your two neighbors' horses can both be treated the same way; namely, starve the horse for twelve hours, give one pint of raw linseed oil and two ounces of turpentine. Twelve hours afterwards give a ball or drench of Barbadoes aloes, 10z; ginger, 1 dram; afterwards give a ball or drench of Barbadoes aloes, 1 oz; ginger, 1 dram; afterwards

DE LAVAL SEPARATORS

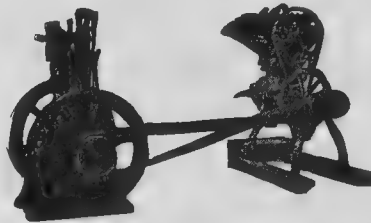
The superiority of DE LAVAL Separators over others is easily apparent to any man who is practical enough to protect himself by investigation against a poor investment. To buy a cream separator without first trying a De Laval is to do an injustice to himself and his dairy interests.

The De Laval Separator Co.

Montreal

WINNIPEG

Vancouver

**The Farmer's Friend**

For Grinding, Pumping, Churning, and General Farm or Machine Shop Work, the Fairbanks-Morse Gasoline Engine

holds the lead. It will do more work than any other Gasoline Engine of same horse power

For Sale by Dealers Everywhere.

Or cut out complete advertisement and send to

THE CANADIAN FAIRBANKS COMPANY, LTD. 92-94 Arthur St., Winnipeg.

Please send me illustrated Catalogue No. Gasoline Engines. I may want.....H. P.

Engine to run

Name

Town

Province

give a tonic, sulphate of iron, 4 ounces; gentian, 4 ounces; ginger, 2 ounces; nux vomica, 1 ounce. Give a tablespoonful every night in mash.

WEAK MARE.

I have a mare that has been sick all spring and summer. She eats well enough but is getting poor. This spring I fed three gallons of oats a day and good hay, but she would not eat all her feed and sometimes she left all.

I used her about a week's time off and on. The last day I had to unhitch

her because she staggered and could hardly walk. I took the harness off and let her go. She began eating at once with a good appetite.

A few days after she got quite sick. I have given her raw linseed oil and turpentine for worms, but she did not pass any. Now she is thin, she steps heavy. When I turn her around she grunts. She shivers in the front legs when she is worked too hard.

Alta.

M. J. M.

Ans.—From the symptoms as you describe them, your mare must be



**CHEW
PAY
ROLL
BRIGHT PLUG
TOBACCO**

DR. FOWLER'S EXTRACT OF WILD STRAWBERRY

CURES

**Summer Complaint,
Diarrhoea,
Dysentery,
Colic and Cramps,
Cholera Morbus,
Cholera Infantum**

AND

All Fluxes of the Bowels.

It is without doubt the safest and most reliable remedy in existence.

It has been a household remedy for sixty-two years.

Its effects are instantaneous and it does not leave the bowels in a constipated condition.

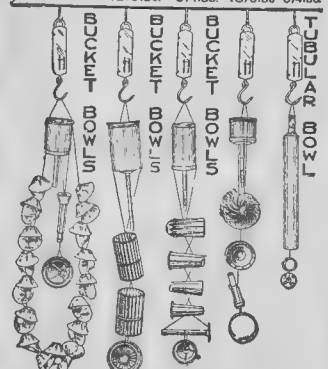
Do not be humbugged into taking something the unscrupulous druggist says is just as good.

Mrs. Ed. Stringer, Hemmingford, Que., says: "I have used Dr. FOWLER'S EXTRACT OF WILD STRAWBERRY with excellent results. I always keep it in the house as it is the best cure for Diarrhoea that can be had."

Saves Hours of Cleaning

Of course your wife would try to wash even the worst cream separator bowl properly twice every day. But why ask her to slave over a heavy, complicated "bucket bowl," like either

12½ lbs 12½ lbs 8½ lbs 10½ lbs 6½ lbs



of the four on the left? Why not save her hours of cleaning every week by getting a Sharples Dairy Tubular Cream Separator with a simple, light, tubular bowl, easily cleaned in 3 minutes, like that on the right? It holds the world's record for clean skimming.

Sharples Tubular Cream Separators are different—very different—from all others. Every difference is to your advantage. Write for catalog M—188 and valuable free book "Business Dairying."

THE SHARPLES SEPARATOR CO.
West Chester, Pa.
Toronto, Can. Chicago, Ill.

**We Own 80,000 Acres of the
Best Wheat Land**

In Western Canada.

Prices from \$7.00 per Acre up.

We can sell you a farm cheaper than any real estate firm in the West, simply because the land we sell is our own; you do not need much cash to buy from us; write for particulars

FARMER'S COLONIZATION and SUPPLY COMPANY
6 Stanley Block, Winnipeg, Man.

suffering with some germ disease, most likely swamp fever, for which there has not been any sure remedy discovered. You might try the following: sulphate of iron, 4 ounces; powdered gentian, 4 ozs. hypo-sulphate of soda, 8 ozs; nux vomica, 2 ounces; powdered digitalis, 4 drams. Give a tablespoonful twice per day in mash.

SUNBURN OR INDIGESTION.

A litter of spring pigs have a scab or scale along the back; the ears are also affected and the tips folded down. Kindly give cause and remedy.

Sask.

A. N. O. U.

Ans.—This condition may be due to sunburn, as we have seen pigs so affected from this cause. For this apply grease or oil. It may be from indigestion, for which reduce the feed. Give plenty of exercise and let the pigs have free access to charcoal. See that the bowels are not constipated.

COCHIN COLOR: KILLING TREES.

Kindly inform me as to the color of a purebred Buff Cochin hen. I bought a pair a few months ago and the hen has black feathers on her tail and wing. Are these objectionable? Could I send her back?

2. At what season should Balm of Gilead trees be cut down so as to kill them?

Ans.—The American Standard of Perfection gives the following as plumage qualifications for Buff Cochin hens: "Surface throughout an even shade of rich golden buff, free from shafting or mealy appearance; under-color a lighter shade, free from foreign color. Black or white appearing in wings or tail is a serious defect and one shall be considered as objectionable as the other. Different shades of buff in neck, back, wings or breast, or in two or more sections, constitute a serious defect. A harmonious blending of buff in all sections is most desirable."

These being the standard qualifications for color in buff cochins, you have evidently been imposed upon in respect to the birds you bought. Whether or not you will be able to get redress depends upon the nature of the bargain made. If you bought them for high scoring birds the seller deceived you, and you should get your money back.

2. Along in mid-summer.

SWOLLEN GLANDS.

Have four-year-old mare, was raised in Ontario last winter. One horse where she was had distemper; this mare seemed all right; brought her west in spring. Shortly after arriving she began to cough slightly at times when feeding. Cough lasted about two weeks. Now she breathes loudly; can be heard a few feet away. Otherwise seems in good health, eats well; is in good condition and is in good spirits. Does not cough, nor is there a jerky motion at flank, as in heaves.

Sask.

J. W. N.

Ans.—It is probable the glands at each side of the throat are still swollen and enlarged, which restricts the passage of air in the throat. Clip the hair off the swollen surface and paint the parts with tincture of iodine.

SIZE OF CHICKEN HOUSE.

What size would a chicken house have to be to hold 50 pullets, without crowding?

Alta.

E. P. H.

Ans.—A house 10 by 15 feet would be about the right size to house 50 pullets. Authorities usually figure 3 sq. feet floor space for each fowl. But so many different styles of houses are in use and so much diversity of opinion among poultry men exists as to what is the best kind to use in particular localities that it is difficult to make recommendations in the matter. In our issue of Aug. 7th, Mr. A. B. Smith discusses this whole question of poultry houses pretty thoroughly, also to any one going into poultry business even on a small scale, the bulletin he refers to, No. 90 of the U. S. Department of Animal Husbandry, would give the latest advice available on such a matter as this.

BONE SPAVIN.

Have horse three years old that I started working this spring and just started throwing out a bone spavin. He is not lame and the swelling is very slight. I put on a blister and turned him on the prairie, but he is just the same yet.

Can anything be done to reduce the swelling and is it liable to cause lameness?

Sask.

T. K.

Ans.—If your colt has never been lame from the spavin it is possible he may never go lame. You cannot reduce the enlargement. If he goes lame blister with the following: biniodide of mercury, 2 drams; powdered cantharides, 2 drams; vaseline, 2 ounces.

INFLAMED UDDER.

About six weeks ago we bought a newly calved cow, but she would not let the calf suck or let us milk her. Her udder was very hard and two teats sore and hard and one-quarter of the udder turned black and broken. We washed it twice a day and rubbed turpentine on it. We also lanced it twice, but now it looks as if the one-quarter of it were coming out. Did we do right?

J. S.

Ans.—I do not consider it would be wise to try to raise any more calves from the cow. The trouble has been your cow was not properly attended to after calving, causing inflammation of the udder and she will most likely lose the use of two or more of the quarters; better let her go dry.

The treatment should have been thorough bathing with hot water and rubbing, or the air treatment

SCROTAL HERNIA.

I have a horse foal which appears to be ruptured at the scrotum. How should he be treated?

Sask.

J. A. S.

Ans.—The only treatment for your colt is castration and this must be what is called the covered operation. Have a thoroughly qualified veterinarian to operate.

PAYING FOR LAND OR WATER.

Can you inform me about the survey of a one-quarter section of Hudson's Bay land, whether you have to pay for a lake on it about sixty acres in extent? The neighbors claim that you only pay for the land that is surveyed on the one-quarter section. I thought the Government surveyed the lakes too. Would the Hudson's Bay Company give me the information how much land and how much water there is?

Alta.

J. S.

Ans.—If you have purchased a quarter section from the Hudson's Bay Company on which there is a lake or large slough, you will only be required to pay for the actual land not covered by water. If, however, the lake or slough is within or any part of it within the quarter section of land which you purchased, it would belong to you. This of course does not apply to navigable lakes or rivers. If you would write to The Hudson's Bay Land Co., they would give you the actual acreage of land on the quarter section mentioned.

Gossip

SCOTTISH SHEEP-DOG TRIALS.

The East Lothian Agricultural Society held an exhibition of dog trials at Haddington the week of the Highland Society's Show, at Edinburgh, the following condensed report of which is taken from the *Scottish Farmer*:

Handsome prizes having been offered, and the course being one of the best in Scotland, there was a large number of entries, nearly all the crack dogs being forward. Mr. W. B. Gardiner ("Ralph Fleesh") acted as judge. Mr. James Scott, Tronehill, who, it was rumored, would run for the first time a son of old Kep, turned up with the aged hero himself, having wisely left the daring youth at home. Never did this great canine artist make a finer display. He led off

The Best in the KOOTENAY

52 acres of splendid fruit land only 20 minutes from the center of the City of Nelson. First-class wagon road through property.

5 acres under the very best of cultivation and 13 acres almost ready for planting.

1 of an acre bearing strawberries.

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\$100 per acre on easy terms.

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NELSON, B.C.

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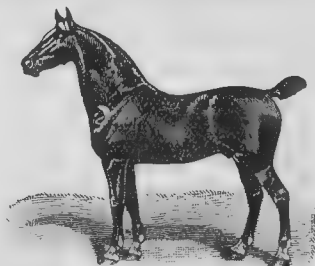
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ought to have before ordering or buying any
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with all his wonted dash and decision, and the moment he focussed his charge (a lot of five) he dropped as if mechanically worked by his master. Then he moved on to the first pole; showed a perfect mastery here; and when the shed was approached everybody felt that a record was being made. Responsive to every gesture of his master, he cleverly cut off the marked two, then drew up to the penning in magnificent style. This, along with the single-sheep and taking-away tests, was accomplished almost perfectly, the result being that he was placed first. Mr. Andrew Brown, Soonhope, came in second with Maid, a seven-year-old, but still youthful when called into action. She entered upon her task with practiced ease, took possession of her lot without any unnecessary display, handled them firmly, still gently; crossed the first pole perfectly, and faced up to the shed like one who had long discovered that much running was bad art and worse practice. Experience was evident in her every move, she attaching more importance to inches of space than did some of her more showy rivals to yards. As she came up to the pen, there was a tantalizing simplicity in her manner, since it seemed to satirize the juvenile flourishes of her rivals. Again, at the pen she showed herself no mean mistress; and on the single sheep, as at the final test, she more than fulfilled the expectations created by her opening points. Mr. A. Millar, Ballageich, with Risp, and Mr. Simon Rutherford, Overhall, with Jim, divided the third. Risp is a son of the famous Frisk, and shows himself in every respect worthy of his sire. His run out and crossing the first pole was faultless; nor did he disappoint at the shedding and penning, his action being truly fascinating. On the single sheep he made a wrong calculation, in no way glaring, but just such as might have been averted. His taking-away was splendid, the course being completed in brilliant form. Jim's first point lacked the decision of his first pole and shedding operations. At the pen he was seen in his old commanding mood, every move marking progress. Like Risp, on the single sheep he threw himself too close on his charge, and thus slightly marred the opportunity of his showing capacity. His taking-away was steady and grandly sure. In placing the fourth, the decision of the judge was subjected to considerable criticism, many thinking that Mr. Wallace's dog deserved more generous recognition. Indeed, had time permitted, we understand the judge would have demanded a re-trial of the last four dogs, their points having made it nearly impossible to state a difference. His (Wallace's) dog took his course skilfully, dropped beyond his sheep in rare fashion, but, according to the judge (although this was disputed) he evinced a slight waver in his succeeding movement. Perhaps the master made a mistake in departing too far from the starting post as the dog was approaching the first pole, thus rendering a flanking turn, which is always important, unnecessary. It may have been concluded that here the dog was weak. At the shed and penning great work was performed. Then on the single sheep the best practice of the day, with one exception, was witnessed. At the taking-away, however, he was not quite so happy, although even here he proved himself a master.

In the confined class, Mr. Thomas Gilholm, East Fortune, was first with Bill, a son of old Kep. This is a great dog, with two pronounced faults. His run out and first pole were dazzling. At the shed his opening points could not be excelled, but as time advanced he seemed to become stubborn, and refused to respond promptly to his master. For the forward move, particularly at shedding and penning, he invariably substituted a half-crescent, which gave ground to the very sheep that ought to have been checked. On the single sheep he handled himself powerfully; and at the taking-away, while he looked a trifle sour, he was obedient enough not to take the law into his own hands. The same owner was also second. This is a sweet little thing, that moved as on the wings of the wind. Her opening turn was unfortunate, and the first pole even more so, but the shed and penning brought redemption. The single sheep defied her, but again at the taking-away she showed some of the approved traits of age. The third prize went to Mr.

Robert Wood, Costerton, and Mr. George Dickson, Alderston, they being equal. Here in both cases the working, though indicative of great possibilities, was too severe, and altogether lacking in point and method. Mr. George Linton, Millknowe, pressed hard on the third, for had his opening performance even approached his closing display he should certainly have commanded the second honor.

The trials gave great satisfaction, all the arrangements being perfect. In the opinion of the judge, the guiding of the sheep, in point of caution and gentleness had never been excelled.

IMPROVING SMALL GRAINS BY SEED SELECTION.

During the past year the work in improving the smaller grains, as conducted under the Canadian Seed Growers' Association, has made a steady and very material advance. Not only has the number of operators increased, but, what is perhaps of more importance, there has been a very decided advancement in the intelligent interest taken in the work, and much has been added to our knowledge as a result. It is gratifying to note the degree in which many of the growers have caught the spirit of the work, and have become sensible of the fundamental principles involved. With the increased interest in the improvement of strains there has come a greater tendency on the part of the growers to conduct trials with a few leading varieties of the crop or crops under consideration, and as a result many unsuitable varieties have had to give way to others more desirable as foundation stock. The improvement and maintenance of these superior varieties and strains seems to offer great advantages. The degree to which many of our best varieties have become mixed with other less desirable sorts is noteworthy. This intermixture is largely due to carelessness on the part of the grower, and to the use of improperly-cleaned, itinerant threshing machines. Some of these unwelcome kinds mature earlier than does the regular crop, and as a result they multiply with great rapidity. As an example of this, we find the vagrant variety of wheat, known as the Assiniboia Red, which contaminates many of the wheat fields of the West, maturing somewhat earlier and shelling more freely than does its host, and hence establishing itself more firmly as time passes.

Then, again, we find the different diseases to which these smaller grains are heir, very difficult to keep under control in large areas. As a result of these things it is almost impossible to secure with certainty strong, healthy, pure and uniform seed of high quality in the ordinary manner. This fact explains the growing popularity of the special seed plot of limited area as a place where high-class seed may be procured. The using of only the best obtainable seed on clean and well-prepared soil, allowing the crop to thoroughly ripen, making it possible to select seed by hand from standing plants of desirable types and in sufficient quantities to perpetuate the same, and threshing and storing separately from other kinds, are the main claims that this system has established in agricultural practice.

While the ultimate aim of the grower is to establish a strain which will yield more bushels of good quality per acre under his conditions than did the original, yet the factors in true breeding are overshadowed by the question of resistance. In Canada, as in all other countries, there are numerous adverse conditions, such as rust, smut, weakness of straw, drouth, impoverished soil, etc., which go to influence the yield, and must be carefully considered in selection work. The selecting of plants which have outstripped their neighbors enjoying equal opportunities has proven the utility of the system within the past year.

While every crop of any considerable consequence is receiving attention, yet the work that is being done in Canada with wheat easily overshadows in importance that which is being carried on with all others, as might be expected. The difficulties which are naturally associated with an extensive system of farming are met with most in the great

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Do you know them? Hunger and thirst, for example, are the sensations that communicate its need of food and drink. You heed these signs, but there are others, just as important, that you frequently neglect.

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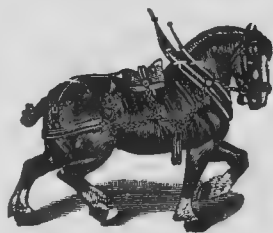
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Importer and Breeder of Clydesdales, Hackneys, Shorthorns and Shropshire Sheep.

Will import another shipment of Clydesdale Stallions and Fillies as well as a few Hackneys in October. Orders carefully filled and satisfaction guaranteed. At prices defying competition, as sales speak for themselves. **37 Stallions Sold Since Jan. 1907; also 25 females (registered).** Look for Exhibit at the Fairs. Business conducted personally. Anyone wanting a show Stallion or a Filly, can have a greater choice than in any other breeding establishment in Canada. Everyone welcome. Yearly home-bred stallions on hand at present as well as a few older ones.



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wheat-growing districts of the West. Here the wonderful fertility of the land, the congenial climate, and the immensity of the scale upon which farming operations are carried on, are potent factors in promoting the growth and spread of noxious weeds, insect pests and fungous diseases. This fact, and what it means, are already well known to the Western grower, and the seriousness with which it is being looked upon is evidenced by the increasing number who are welcoming a system which will enable them to keep these things under control.

Many varieties and strains of oats and barley are also being worked upon, and excellent results are being achieved, while such crops as beans, peas, clover and millet are also receiving the advantage from the lessons taught by the response of our leading crops to selections therefrom of seed from the most coveted plants for seed purposes. The advantages of this system of maintaining a high standard in crop raising should appeal to every grower.—Extract from the last annual report of the Secretary of the Canadian Seed Growers' Association.

CANADIAN DAIRY CATTLE FOR JAPAN.

On July 18th, the second consignment of 60 head of Canadian dairy cattle

it would take 14 days to reach Seattle, and 14 days from there to reach their destination.

DAUPHIN FAIR.

A wet and stormy forenoon undoubtedly kept many away from this exhibition on 6th inst. and caused numerous entries not to appear in the rings. Allowing, however, for this, one is more impressed than ever with the needs for an importation of better stock if farmers in this good land are to cut any figure in the beef or dairy industries. Horses were the best represented of all live stock and some useful animals shown in the agricultural classes. Reverting to the breeding of an improved cattle the evidence given on Fair day before the Beef Commission seems to point to the fact that farmers are of the opinion that they are not able to make sufficient out of their produce in this department to warrant extensive outlays in high class stock. If such be the case one can hardly blame them, as business men, for refusing to embark upon a non-lucrative branch of their trade. It is, nevertheless, a fact greatly to be deplored, for a district so well endowed by nature ought certainly to maintain herds of high-class animals. Cereals and legumes grow here, if properly handled, as well as any place in the province, and all is present but the will and ability of farmers backed up by



SIR HUMPHREY 9889, CHAMPION HACKNEY STALLION, INTERNATIONAL HORSE SHOW, LONDON, ENG., 1907.

Owned by Pabst Stock Farm Milwaukee, Wis.

were shipped from Howick, Que., via G. T. R. and C. P. R. for Seattle, and thence by steamship across the Pacific to their destination, Yokohama. Two years ago, representatives of the Japanese Government visited Canada and selected a considerable number of Ayrshires, which have proved so satisfactory that more were called for. Three representatives, N. Niki, K. Tsukonchi and S. Takashima, came over again this summer, and, after visiting a number of herds, made selections of 45 Ayrshires from the herds of W. W. Ballantyne, Stratford, and R. Hunter & Sons, Maxville, Ont.; R. R. Ness, Wm. Hay, P. D. McArthur, J. W. Logan and James Byson, Howick, Que., and Jas. Cottingham, Chas. Moe and Jas. Cavers, Orms-town, Que. These animals ranged from one to two years old, the two-year-olds being nearly all forward in calf. Four yearling bulls were included in the Ayrshire contingent; one purchased from Mr. Ballantyne, the others from Mr. Ness. Eleven Holsteins purchased from R. Wing, of Syracuse, N. Y.; one Hereford bull from H. D. Smith, Hamilton, Ont., and a Shorthorn heifer from J. M. Gardhouse, Weston, were included in the shipment. The animals were collected at the stables of Mr. R. R. Ness to be tested, marked and photographed singly. It was expected that

improved railroad facilities or some further inducement to cause stock breeding and raising to become more lucrative.

In the Shorthorns the exhibits were greater in number than the other breeds and the bulls shown were fair. Mr. Mooney of Dauphin did not have an easy task in placing those of two years and over. Mr. Caldwell's animal was certainly in better showing condition and that possibly attracted the judge's eye for Mr. Martin Playford could have had little the worst of the contest in points. In cows again many would have preferred the second to the first, the former showing in their opinion better breeding. No fault could be found with the placing of the other classes and indeed, in several there was but one animal shown. Mr. Dunfield had some good looking Ayrshire cows, and no opposition. Mr. D. F. Wilson was the sole exhibitor of Jerseys and had a fine little bull down from Forked River. Grade dairy classes were distinctly poor, as were also the pigs and sheep in both quality and quantity.

Last but not least are the horses and here a decided improvement is to be noted in numbers and, in some classes, in quality. Two heavy draft stallions were paraded and Chas. A. Gofton's



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Star Farm Shorthorns



Herd headed by the imported Cruickshank Bull Allister, winner of championship at Prince Albert and Saskatoon. Herd also won twelve first and eleven second prizes, 1906. 3 Bulls that have won 1st and 2nd prizes Prince Albert and Saskatoon, for sale. Also Barred Plymouth Rocks.

Farm one mile from station.

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Importer and Breeder of Scotch Shorthorn.

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Do you want to grow CATTLE that go to market early, that make the BEST use of their feed, and so leave the largest PROFIT to the feeder? Then use Hereford Blood. Useful young stock offered the trade. Herd headed by Champion 1st. Get my quotations.

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BLACKLEG VACCINE FREE

To introduce, we will send one 10-dose package (value \$1.00) of

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and our booklet on Blackleg and Anthrax FREE to each stockman who sends the names and addresses of 20 cattle-raisers. If you do not want Vaccine, send us your name and address on a post card and we will promptly send the booklet. It is up-to-date, valuable and interesting. Mention this paper. Address

THE CUTTER LABORATORY
BERKELEY, CAL

Prince of Edengrove, formerly owned at Portage, outclassed his competitor. In the agricultural sections brood mares with foals at foot formed a large class and Dr. Wyrant and Mr. J. E. Johnson had to take some time in making the award. The mares were of considerable variety, some being very light for entry here. Mr. John Killop with a real good pair took the team prize from Messrs. Kinstry and Sons. The winners were bought last fall, we understand from Carman, and were the most attractive exhibit on the ground. The youngsters were also well represented and taken all through the agricultural and heavy draft horses were good. Mention might be made also of Mr. M. Perry's team, which took first in heavy draft, best groomed team, collection and exhibition of farmer's horses and the walking.

SHADE AND SHELTER FOR CHICKENS.

An exceedingly useful and simple device for providing chickens with both shade and shelter, says the *Irish Homestead*, consists of two ordinary chicken coops, set down adjacent to one another, at any desired distance apart, say four to six feet. The fronts of both coops face the same direction, and the space between them is sheltered by an awning, supported by a light frame, which extends from one coop to the other. The coops may be each about two and a half feet square, and will accommodate two hens with their broods, the sheltered space being used in common by both broods. The awning may be of any light material, such as canvas, unbleached calico, oil cloth, etc., and it extends over the top and back, with a few inches hanging over the front. When the chicks are under a week old, and it is desired to confine them to limited space, this arrangement will be found most useful, it being only necessary to close the front with a strip of netting, or for greater convenience, a piece of netting may be attached to a frame, and used when required for the purpose named. When the chickens are older and have full liberty to roam, this arrangement for providing shade and shelter is no less useful than when they are confined, and they quickly learn to seek it when a sudden shower comes on, or when the heat of the sun is excessive. For rearing turkeys and ducklings, also, this double cooping plan with shelter will be found most useful, for these birds, as well as chickens, are much injured by extremes of heat and cold, and by rain storms, when, through carelessness, no shade or shelter is provided. It is not generally believed that young birds suffer much from exposure to the summer sun, because the effects are not immediately apparent, but experience shows that many of the stunted, thriftless, almost bare chickens which are to be seen in summer time, owe their condition to exposure. This is particularly true in those localities where there are no trees, shrubs, or other natural shade, in which the birds may find refuge from either sunshine or hard weather.

HAY ONLY HALF A CROP IN QUEBEC.

Haying is now in progress throughout Quebec, says the *Huntingdon Gleaner*. From wide inquiry we are forced to believe it is not half an average yield. Where the land is a stiff clay, there is none to cut in the furrows, owing to winter killing, while the severe frost played havoc with clover roots. To make matters worse, weeds are superabundant, meadows being alternately yellow with buttercups and white with ox-eye daisy. Hay is by far Quebec's most abundant crop, therefore its being half a yield is of serious consequence. There is a prospect of grain and corn turning out well, which will help matters, and it is to be hoped the present promise of these crops will be realized.

LIFE OF FARM MACHINERY.

With good care and housing, an ordinary grain binder on the average 160-acre farm will last from 12 to 16 years. In comparison with this, a binder



Lump Jaw

The first remedy to cure Lump Jaw was

Fleming's Lump Jaw Cure

and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in

Fleming's Vest-Pocket Veterinary Adviser
Most complete veterinary book ever printed to be given away. Durably bound, indexed and illustrated. Write us for a free copy.

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If you want feeders that will graze you must have with the best. Shetlands and White Leghorns for sale.

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JAS. BRAY, Portage la Prairie



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FOR SALE—Shorthorns, combining milk and beef, and prize winning Tamworths, pigs of both sexes. Write me,

A. W. Caswell, Neepawa, Man.

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Ranchers and farmers need the reds, whites and roans, if you wish to breed the best and most profitable cattle. Can supply you with tip-top stuff. Am offering two-year-old Bull—a herd header—and 14 yearling Bulls; also Cows and Heifers.

JOHN RAMSAY, - Priddis, Alta.

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Solicitor for the FARMER'S ADVOCATE for Alberta and Saskatchewan.

GRENFELL, SASK.

LANDS FOR SALE

Sittyton Shorthorns

The Champion Herd at Regina and Calgary, 1906. At present all my bulls are sold but I can supply a number of first-class females of all ages and of most approved breeding. My old stock bull, Sittyton Hero 7th, has left a good mark. Get my prices for females before closing elsewhere.

GEO. KINNON, COTTONWOOD, Sask.
Lumsden or Pense stations.

ISLAND PARK HEREFORDS

The Champion Herd at Winnipeg and Brandon for three years. This year won nine first prizes out of ten competed for. At Winnipeg, three championships and one grand championship. A few good young females for sale.

Address: **J. A. CHAPMAN, ISLAND PARK FARM, BERESFORD, MAN.**

MAPLE SHADE

SHORTHORNS SHROPSHIRE

One yearling "Lavender" bull for sale
Younger bulls growing
All shearing rams and ewes sold
Will sell a few good ram lambs

JOHN DRYDEN & SON
Stations: Brooklin, G.T.R. Myrtle, C.P.R.

Brooklin, Ont.

Bellevue Herd of Yorkshires

FOR SALE at present, the champion boar (1906) "Cherry Grove Leader," winner of first prize at Winnipeg and Brandon Fairs 1907. "Prince II," champion boar at Brandon 1907. Both these boars got by the champion boar "Summer Hill Oak 17th," at Winnipeg 1905 and Brandon 1905-6. What better record do you want? Boars and sows, all ages, at reasonable prices. Order early if you want any. The best herd west of the Lakes in Yorkshire and Tamworth Swine.

OLIVER KING, WAWANESA, MAN.

GOLDEN WEST STOCK FARM

Clydesdales and Shorthorns

Stallions and mares of excellent breeding, of all ages, for sale
Also some choice young bulls fit for service and a number of cows and heifers of noted Scotch strains.

Many of them Leading Prize Winners at the big Western Fairs.

P. M. BREDT
Regina, Sask.



SHORTHORNS and YORKSHIRES

We have ready for shipment now, a number of Bulls and Heifers of various ages and of good quality. These will be sold cheap, as we are overcrowded.

In Yorkshires we will be able to ship by the end of June a grand lot of young pigs, of either sex. Also a few good Berkshire Boars. These are mostly from imported or prizewinning stock.

For particulars write to
WALTER JAMES & SONS, Rosser, Man.

WOOL

Write for our prices
E. T. CARTER & CO., TORONTO

CLENDENING BROS. Harding, Man.

RED POLLED CATTLE

The Grain Grower's Cow

A few Bull Calves for Sale YORKSHIRE HOGS

There is money in Hogs if you have the right kind. Our breeding insures both quality and quantity. Spring Pigs of both sexes for sale.

SPECIAL OFFERING OF

8 Good Young Bulls FIT FOR SERVICE

Geo. Rankin & Sons, HAMIODA, Man.

Brampton Jerseys

Select your stock bull or family cow from Canada's most famous and largest Jersey herd.

B. H. BULL & SON
Brampton, Canada.

OUR

Shorthorns & Yorkshires

Will be seen at the leading Western Fairs this year.

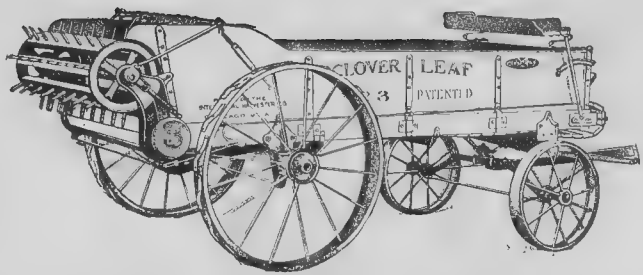
W. H. ENGLISH & SONS, HARDING.

Terra Nova Stock Farm HERD OF ABERDEEN-ANGUS CATTLE

All the best families represented.

Some fine young bulls for sale from both imported and home bred cows. Prices reasonable.

S. MARTIN, Rounthwaite, Man.



Big interest on your investment.

A Farmer who knew said that if a man did not have the money to buy a manure spreader, he could afford to borrow it, pay 50 per cent interest, and still make money.

This shows how extremely profitable the use of a manure spreader is.

It will make more than 50 per cent per year on the investment.

It increases the fertilizing value of barnyard manure, the only fertilizer produced on the farm, fully 100 per cent, and when you remember that this barnyard manure is worth \$2.00 or more per ton, you know how much money a spreader makes for you on every ton of manure hauled into the field.

Of course, you must be sure and buy a good spreader. We mean a strong, dependable, practical machine—one that you can load up day after day and drive into the field with absolute certainty that it will spread as many loads per acre as you desire.

The I. H. C. spreaders, Corn King and Cloverleaf, will do this. They can be regulated to spread any number from 3 to 30 loads per acre. The principal point of difference is in the apron. The Corn King is a return apron machine and the Cloverleaf an endless apron machine. Both spreaders are replete with valuable features, not found on other spreaders.

For instance, the single lever on the I. H. C. allows the driver to make every adjustment—

change the rate of feed, return the apron, start the machine, or stop it.

Then again there is the vibrating rake, a feature not found on any other spreader. You know that when first starting the machine, if not properly loaded, the manure is apt to pile up against the cylinder and clog it. Perhaps great chunks will be thrown out until the load is properly fed. The vibrating rake on the Cloverleaf and Corn King spreaders prevents this irregular feeding. It levels the load before it reaches the cylinder and insures an even and uniform distribution of the contents. You won't find a whole lot coming out directly over the center and none at all at the sides, but instead an even distribution the full width of the cylinder.

There are many other excellent features about these spreaders—both wheels are drive wheels, the steel wheels cut under the box, the apron never binds nor buckles, the front axle is well trussed, the frame is staunch and absolutely rigid.

We suggest that you look into this question of a profitable manure spreader very carefully. The local agent in your town will gladly demonstrate the line he handles. Or write the general office for catalogues, colored hangers, or other information desired.

Send for copy of "Farm Science" or "Wasteful Farm Practices" which contain very valuable information on agricultural subjects of special interest to you.

Call on our Local Agent or write nearest branch house for catalogue.

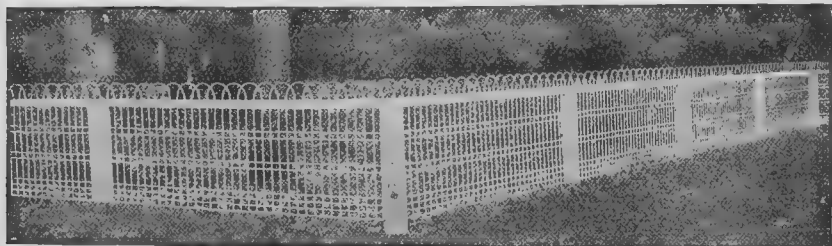
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International Harvester Company of America, Chicago, U.S.A.
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Martinson & Co. Agents for Southern Okanagan Farm and Fruit Lands.

I have for sale 320 acres, 4 miles South of Swan Lake, Man., N. E. 1/4 of 31 & N. W. 1/4 of 32; Township 4, Range 10. Cheap at \$4000.

Make us an offer.

Martinson & Co., Penticton, B.C.



PAGE WHITE FENCES

The Acme style you see above costs only from 16 cents a linear foot. Handsome and durable for lawns, parks, cemeteries, etc. Any height or length. Gates to match from \$2.25. Write for catalog, or inspect this ideal fence. From us direct or any Page dealer.

The PAGE Wire Fence Co., Limited Walkerville Toronto Montreal St. John Winnipeg 212

LAMENESS

Whether it is a fresh Bruise, Cut or Strain—or an old Spavin, Splint, Ringbone or Swelling—you can cure your horse with

Kendall's Spavin Cure

Thos. Castles, of Newark, N.J., bought a horse—lamed with a Jack Spavin—for \$100. He cured every sign of lameness with Kendall's Spavin Cure—won five races with the horse—then sold the animal to his former owner for \$1,000.00.

WELLINGTON, N.Z., Nov. 2nd, '03.

"I have found your Spavin Cure a very fine remedy for all sorts of lameness in horses and I am never without it."

R. J. WISEBY.

Get Kendall's Spavin Cure—the remedy used by two nations for two generations. \$1. a bottle—6 for \$5. Our book—"Treatise On The Horse"—will save you many a dollar if carefully read and acted upon. Write today for a free copy.

DR. B. J. KENDALL CO., 27
ENOSBURG FALLS, VERMONT, U.S.A.



doing no more work without extra care or housing will last but from five to eight years. Records show that many farmers have kept their tools in constant use by good care for more than twice the average life of the machine.

We will assume that a farmer starts in farming with \$1,000 invested in new machinery, and that if sheltered and well cared for, it will last ten years, and if not sheltered, only five years, says Professor H. M. Bainer of the Colorado Agricultural College. If the implements stand out in the weather it will cost another \$1000 to replace them at the end of five years. The compound interest on this amount for five years at five per cent. amounts to \$276.28, or the total amount of money paid out for machinery with its interest amounts to \$1,276.28.

A good tool shed large enough for all this machinery can be built for \$200. The compound interest on this amount for ten years at five per cent. equals \$125.00, or the shed may be considered to have cost \$325.00 at the end of the ten years. After paying for the shed, it leaves us at the end of the ten years a balance of \$950.68 in favor of housing the machinery, and the shed is perhaps good for ten years more use.

FEEDING DAIRY COWS.

Experiments have shown that 60 per cent. of all the feed a dairy cow can

industrial population. Moreover, she stands, at the beginning of the twentieth century, where England stood a few centuries earlier. England, with her resources in coal and iron, and fronting on the Atlantic, was in an admirable position to reap the advantages due to the opening of the New World. British Columbia discovers herself fronting on the Pacific at the moment when the Old East is awakening from the sleep of centuries to afford the greatest market and the most wonderful of commercial opportunities ever seen.

There is something in it. The development of British Columbia will make one of the most interesting of the stories told of the next twenty-five years.—*Weekly Sun.*

DEHORNING CALVES.

I have dehorned many calves and have had no failures as yet. My method has been as follows: Clip the hair from the top of the horn when the calf is from two to five days old; slightly moisten the end of the stick of caustic potash with water, or moisten the top of the horn firmly with the potash for about a quarter of a minute or until a slight impression has been made on the center of the horn. The horns should be treated in this way from two to four times at intervals of five minutes. If, during the intervals of five minutes after one or more applications, a little blood appears in the center of the horn,



ENGLISH SHIRE STALLION TATTON FRIAR.

Let for season of 1907 for \$5,000. Foaled 1900, sire Conquering Harold.

eat is appropriated to sustain her body. If a cow is fed to 70 per cent. of her capacity, only 10 per cent. of the ration can be used for milk production. Liberal feeding is necessary, but its profitable extent depends on the individual animal. Successful dairying depends fully as much on the feeder as on the cow. A proportion of two-fifths concentrates to three-fifths roughage is widely and successfully used. Of course feed stuffs must be chosen to balance well and with an eye to their market value.

BRITISH COLUMBIA'S FUTURE.

"British Columbia will in a few years be the greatest of the Canadian provinces. Ere long she will outclass in importance all the other provinces combined."

This was the substance of a statement recently made to us by a close student of commercial affairs. In giving reasons for his belief this gentleman pointed to the natural resources of the Pacific Province—her coal, iron, forest wealth, and the electrical possibilities in her mountain streams. Herein, it was said, are all the raw materials necessary for manufacturing development on an enormous scale. In her fisheries, fruit, wheat, and cattle producing capabilities British Columbia also has within herself capacity to provide the food needed for a great

it will then only be necessary to give another very slight rubbing with the potash.

The operation is best performed when the calf is under five days old, and should not be attempted after the ninth day. Caustic potash can be obtained from any druggist in the form of a white stick; when not in use it should be kept in a stoppered glass bottle in a dry place, as it rapidly deteriorates when exposed to the air. One man should hold the calf while an assistant uses the caustic. Roll a piece of tinfoil or brown paper around the end of the stick of potash, which is held by the fingers, so as not to injure the hand of the operator. Do not moisten the stick too much, or the caustic may spread to the skin around the horn and destroy the flesh. For the same reason keep the calf from getting wet for some days after the operation. Be careful to rub on the center of the horn, and not around the side of it. Caustic potash is poisonous, and must therefore be kept in a safe place. Calves that I have treated are now from two to thirty months old and no signs of a horn have appeared on any of them.

Bear in mind that the potash burns after you are through with the operation and that some calves have thin skin and others thick, so that it takes a little experience to determine just when to stop the application of the potash.—J. F. BROWN, in *Hoard's Dairyman*

HANDLING A VICIOUS BULL.

If a bull has once shown the least disposition to be vicious, he should never again be taken out of his stall without a ring in his nose and a staff of first class tough wood, with a strong safe, spring snap, or, better, a jointed connection with a turn-screw, as spring snaps are liable to get out of order. Indeed, it is not absolutely safe to trust even a mild tempered bull that has never shown a tendency to be cross, as many cases have occurred where such an animal has suddenly and surprisingly turned vicious, owing to some unknown cause, and done his caretaker to death. A very vicious bull cannot be safely taken out, even with a staff, and the simply safe way to handle such is to blindfold him by securely fastening a sack or something of the kind on his head so that he cannot see either in front or sidewise. This device is equally effective in quieting an excited or nervous cow, heifer or steer that one wishes to lead. The writer recalls the case of a nervous heifer, shipped alone in a freight car, being so excited on arrival at her destination that it was impossible to untie her in the car, as she would jump at a person, and would have impaled him upon her horns. A horse blanket was thrown over her head, then a sack fastened over her eyes, and she was led out quietly and tied behind a wagon, where she followed as quietly as could be desired.

THE WORLD'S WHEAT YIELDS.

Following is Beerbohm's statement regarding the world's wheat production for the years given:

Year.	Bushels.
1875.....	1,800,000,000
1878.....	2,000,000,000
1884.....	2,240,000,000
1887.....	2,230,000,000
1890.....	2,264,000,000
1893.....	2,474,000,000
1895.....	3,496,000,000
1897.....	2,281,000,000
1901.....	2,940,000,000
1902.....	3,195,000,000
1903.....	3,292,000,000
1904.....	3,202,000,000
1905.....	3,362,000,000
1906.....	3,500,000,000

In the 21 years from 1875 to 1897, there was an increased yield of 461,000,000 bushels, a fraction less than 27 per cent., not far from the largest estimated natural increase in population.

But in the succeeding nine years—1898 to 1906, inclusive—the increase was 1,219,000,000 bushels, almost 54 per cent., more than four times the estimated increase of the world's population during the same time. The figures, as a whole, show an increase in the world's production of 100 per cent. in 30 years, while the extreme estimate of the increase in population does not exceed 45 per cent., and the estimates that are probably nearest the truth place the increase at from 30 to 35 per cent.

DOUKHS IN THE DOG DAYS.

A tone of despair in the report that the Doukhobors have decided not to settle down seems to imply that this offence is greater than if they had decided not to settle up. We are so accustomed to have people remain in one place that we have grown to imagine there is some special virtue attaching to it. This notion leads naturally to the view that the Doukhobors are guilty of some kind of offence in moving from place to place. It may be in accordance with this distorted conception of right and wrong that we allow the "rand Trunk" to discourage locomotion by ignoring its obligation to maintain two-cent rates. But that is another story. All our traditions are against moving. In England's early days when laws to keep down wages were being scandalously evaded they were supplemented by laws preventing people from moving about in search of work. The crime of poverty, of which our laws take severe cognizance, is called "vagrancy," thus implying by the legal designation that the guilty are likely to be addicted to the greater or attendant sin of moving from place to place.

But while locomotion is a crime, traditionally and intuitively, it is hard to condemn it by the strictest or severest application of the accepted canons

of morality. The man whose eyesight was restored was wisely admonished to tell no man, but was not told to remain in one place. On the contrary, he was told to go his way. The grateful Samaritan was also told to go his and a similar admonition was given to the nobleman of Capernaum. Pip may not have been justified in the literal interpretation of his duty to walk in the same all the days of his life, yet there are the highest moral precedents and admonitions for those who would walk. Israel walked upon the dry land in the sea. Joshua commanded his messengers to walk through the land. And when the disciples were sent forth they were told to provide neither scrip for their journey nor shoes, nor yet staves. In the face of all this it is clearly illogical to hold up our

traditional antagonism toward locomotion to convict the Doukhobors of wrongdoing. But logic can never stand against tradition.

The Doukhobors want to move about and cannot understand why we insist on their settling down. As they stand still and look as us they are comforted by vagrancy laws, trespass laws, railway laws, and international laws. They must not cross the boundary or walk along the railway tracks, and our trespass laws invite them to step off the earth. Thoreau, when pursued by a tax collector to the cabin he had built with his own hands on Walden pond, said that if a man should go to the farthest corner of the earth or the remotest nook in the universe men would pursue him with their condemned institutions. We are pursuing the

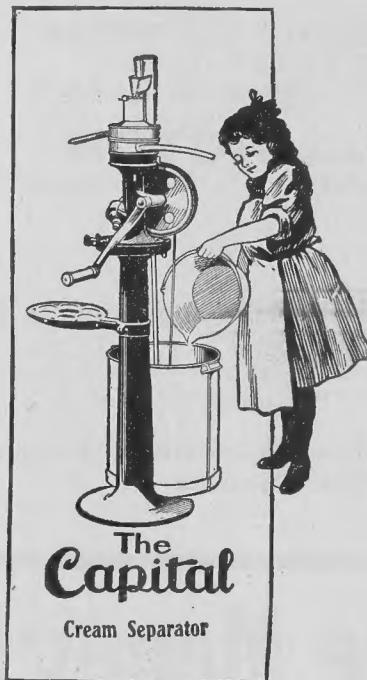
Doukhobors with our institutions, presenting to them the Mohammedan alternative of the Koran or the sword. They must accept our Koran of multiplied illogical traditions or go to jail. An Indian with a reserve can sleep on it at night when he is weary. We have parks, squares, and so-called public areas, but if we should attempt to sleep on any of them we should find ourselves behind iron bars. Benches are removed for fear we may so much as sit comfortably on them. Out in the prairie, where there is abundance of room for roving, we will not let the Doukhobors move about. In the city, where there is no room for roving, we will not let them sit down or even stand on the street. Truly we must seem in their eyes a strange people.—*The Globe*.

You could make good money as a "CAPITAL" agent

Some CAPITAL agents are busy farmers. Some are creamery helpers. One of the best ones is a minister. They make good money, and they don't have to work too hard to make it. They make clean money because the CAPITAL happens to be the cream separator it isn't necessary to lie about. The plain truth sells it.

This spring we are expanding our field force—adding a few good men to our agency staff. Possibly we can fit you in,—if you are the right kind of a man. You needn't be a dairying expert; and you needn't put up a cent of money. You can do your other work and sell the CAPITAL besides, if that's the way you'd rather have it. It will add much to your year's earnings, even that way.

Or you can make a business of the CAPITAL,—a good business,—substantial, permanent, profitable, and on the square all through.



buy a CAPITAL; introduce him to those people; work with him all the time, and pay him well for whatever he does.

We will teach that man how to show people why one separator is profitable and another less so, and why the CAPITAL will make more money for the farmer most easily.

We will show him why the CAPITAL is the easiest separator there is to run,—the easiest to keep clean,—the one that PROVES itself,—the one with a common-sense, low-down back-saving tank.

We will convince that man, so he can convince others, that the CAPITAL Separator gets ALL the butter-fat out of milk with less effort and greater certainty.

We will prove to that man, beyond question, that the CAPITAL skimming device is the simplest, the surest, and the easiest to operate, day in and day out,—the easiest to clean, day in and day out,—the slowest to wear out.

That much we will do for anybody who will write and ask.

Besides that we will teach the right man how to sell separators, and demonstrate to him why the CAPITAL Separator is the one to sell,—because it is the ONLY one any farmer can really afford to buy.

We want ten good men Suppose YOU write

There are ten districts or so, right now, where a good man can start in and sell CAPITAL Separators to people who are ready to buy them just as soon as the machine is demonstrated to them. Each of those districts is for the right man, and he can have the field to himself. But he must be the RIGHT man,—truthful, honest, clean cut, with good common sense.

For that man there's just as much money, in reason, as he wants to earn under a liberal, square-deal arrangement. We will protect him in his field, supply him with the names of people ready to

The right man can learn all this quick; and he can learn, too, how we make the CAPITAL buy itself in a very few months' time. The selling terms are the easiest kind of terms. The guarantee back of every CAPITAL machine absolutely protects the customer and gives the agent a feeling of solid security that's worth having. It's a fair, square, straightout chance, this, for the right kind of a man to make money and make friends for himself. The CAPITAL does that for every man who sells it, because it makes money for every man who buys it.

Think it all over,—remember you are not called on to invest a cent,—we will show you how and where to sell the CAPITAL,—protect you in your district,—and hand you over a paying business that will profit you well for as much or as little time as you feel you can give it.

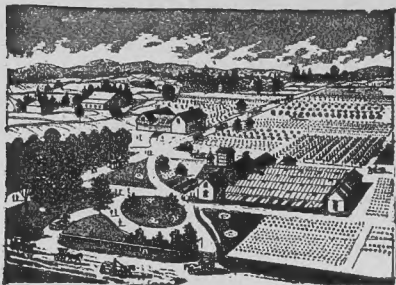
Think it over, and—no matter where you live—write to

The National Manufacturing Co., Limited
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HARDY TREES FOR A TREELESS COUNTRY

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"CANADA'S GREATEST NURSERIES"



Thoroughly tested and recommended by the

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Start now at best selling time
BIG INDUCEMENTS, PAY WEEKLY, PERMANENT EMPLOYMENT.

Specially designed Western Outfit free. For full information write—

STONE & WELLINGTON

Over 800 Acres

FONTHILL NURSERIES

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Columbia River Fruit Lands, Kootenay, B. C.

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J. D. Anderson, British Columbia Government Surveyor
Trail, British Columbia



Oxydonor

Gives Vigorous Health Without Medicine.

OXYDONOR constrains the body to cure itself according to its own laws, through its own means—its organs.

OXYDONOR effects this by causing the organism to be vitalized to the maximum degree, through free absorption of oxygen from the air.

OXYDONOR is neither a remedy nor electrical appliance. It belongs to Diaduction—the new science, the result of fifty years' investigation of the Laws and Principles of Life.

"My husband had a paralytic stroke. For four months doctors did all they could for him but nothing could help him. He could not move his legs but soon after applying OXYDONOR he could move his legs and toes. He had a clot on the brain and doctors said nothing could help him but an operation. The Oxydonor cured that."

My little boy had Eczema for over four years—his face, ears and hands covered with sores. We sent him to the hospital all last summer and he was sent home worse than ever and pronounced incurable. We then applied Oxydonor and now his flesh is quite clear, a wonder to everybody.

MRS. JOSEPH KEE,
1006 Dundas St., Toronto.

Write for free books, giving grateful testimonials from a few of those who have been cured. Beware of fraudulent imitations. There is but one genuine Oxydonor—and that bears the name of the inventor—DR. H. SANCHE—engraved on the metal. Look for it.

Dr. H. Sanche & Co.
358 St. Catherine St. West,
MONTREAL 16
61 Fifth Ave. Detroit, Mich.

Mr. John Horn of Regina, announces that he has got ready for sale his spring importation of Clydesdale fillies, many of which are ready to go on and do heavy work.

The sale of purebred and grade Hackneys at Rawlinson's ranch, Calgary, last month, was a most gratifying success. Horses sold from \$40 up to over \$1,000 and the total receipts of the sale totalled up near \$70,000. Buyers were present from considerable distances, but the heaviest buyers were from the province. Reid and Baxter of Olds, Alta., took the largest single, but having some 40 head at the end of their buying. Jas. Mitchell, formerly of Winnipeg, but now at Vancouver, took a few to the coast. Will Moodie, Bryce Wright, John A. Turner, and other horse fanciers, picked some good ones from the stud before it was disbanded.

MACLEOD FAIR.

Macleod Agricultural Fair came off on July 31st, Aug. 1st and 2nd. In some respects it was not up to its usual standard of excellence, for like all other fairs, the exhibits showed the effect of the backward season and of the late severe winter. Live stock made a rather small showing. In horses the competition in some classes was keen; in others the entry was small. In cattle the chief exhibitors were J. G. Vosburg, Leavings, and J. Homer, Macleod, in Shorthorns, E. Whiffle in Herefords, and H. Watson in grades. Swine were shown by Vosburg and Homer. Sheep were not exhibited. Agricultural products, grain, vegetables, etc., made a creditable display. There was also a good exhibit of poultry. Horse racing formed the major attraction.

A FABLE.

The hen remarked to the muley cow, As she cackled her daily lay (That is, the hen cackled), "It's funny how I'm good for an egg a day. I'm a fool to do it, for what do I get? My food and my lodging. My! But the poodle gets that—he's the household pet— And he never has laid a single egg yet— No even when eggs are high."

The muley cow remarked to the hen, As she masticated her cud (That is, the cow did), "Well, what then, You quit, and your name is mud. I'm good for eight gallons of milk each day, And I'm given my stable and grub; But the parrot gets that much, anyway— All she can gobble—and what does she pay? Not a dribble of milk, the dub!"

But the hired man remarked to the pair "You get all that's comin' to you. The poodle does tricks, an' the parrot kin swear, Which is more thin you kin do. You're necessary, but what's the use O' bewailin' your daily part? You're bourgeois—workin's your only excuse; You can't do nothin' but jest produce— What them fellers does is Art!"

—Cleveland Leader.

"That's all right, Sis," answered Tommy. "I could see that you were only playing telephone. He was ringing you up—oh, you needn't hide your left hand behind you—but he had his lips entirely too close to the receiver."—Chicago Tribune.

"I suppose you did lose a little money. Forget it! You ought to take things philosophically." "I always do, but its hard to part with things philosophically."—Philadelphia Press.

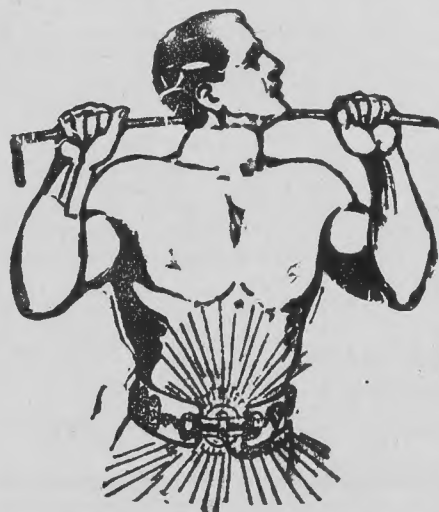
"I'll wager Nell will not give herself away this summer the way she did last!" "How was that?" "She and Dick had their heads together so much that Nell got freckled on only one side of her face"—Detroit Free Press.

Make More Money!

Health and Energy Mean Prosperity

You can't add to your income while you carry about that outfit of weak nerves.

Bodily strength and vigor is the principal stock of about 19 men out of 20.



The most profitable investment you can make is to increase this capital stock, and you can do this if you will use electricity as we apply it, a few hours every night for a while, and build up your nerve power.

Electricity is nerve power. That fact was proved years ago, and plenty of nerve power means abundant strength and energy.

"Look here," said a man in my office last week, "your Belt is better than any medicine chest. It's better than having a doctor right in the house all the time. My wife uses the Belt in the afternoon and I use it in the evening. We wouldn't part with it."

Yesterday a man wrote in: "I suffered for 10 years and your Electric Belt cured me. My father was on a sick bed when we got the Belt, and the doctors had given him up. He used the Belt, too. In four days he was up and walked seven squares. He is now running two hotels and manages both himself."

"That's coming pretty strong," you say. Call at my office and we will show this evidence, and more, too—all going to prove that our statements about the Dr. McLaughlin Electric Belt are conservative, compared with the actual facts.

Don't stick in that old rut. Help Nature along by the intelligent use of this wonderful force, Electricity, and you can overcome your bodily weakness, your pains and aches, double your strength and vigor, double your income and add to your balance in the bank.

Below we give you specimens of the kind of letters we get every day by the score from people who have used this grand remedy.

"Before I commenced wearing your Belt I couldn't take a drink of cold water, it would distress me so, but now I can eat and drink anything that is set before me. There is no ache or pain of any kind about me. I haven't felt so well for 10 years, and I claim it all from using your Belt."—M. McKENZIE, Gordias Que.

"I am well satisfied with your Belt. I feel well and can work without being fatigued and done out like I used to be."—JOSEPH C. CARTER, Lambton, Ont.

If you are sceptical, all I ask is reasonable security for the price of the Belt, and

WHEN YOU ARE CURED PAY ME

The Dr. McLaughlin Electric Belt cures Indigestion, Constipation, Weakness of the Liver and Kidneys, Rheumatism, Neuralgia, Lumbago, Sciatica; overcomes the effects of exhaustive habits—every sign of weakness in men or women. It puts new Life and Energy into the Nervous System.

Ginger up! Use this Belt and become a Man!

Call at my office or send me this coupon and I will mail you my 34-page FRANK BOOK. It points the way to Health and Prosperity.

Dr. M. D. McLaughlin

112 Yonge St., Toronto, Can.

Please send me your book, free

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FARMER'S ADVOCATE OF WINNIPEG Limited, Winnipeg, Man.

FARM CHEESE MAKING.

A good method of home cheese-making is as follows: Take a quantity of fresh morning's milk, say 100 pounds; add enough rennet to coagulate in twenty-five minutes; when curd is well set, cut into pieces with a cheese knife or similar instrument, the size of peas; raise the temperature slowly to 100 degrees Fahrenheit, requiring about twenty minutes to raise this temperature. The whey will separate quickly from the curd and will be noticed by the watery green presence. When the curd is sufficiently cooked, which may be tested by the following process: rolling between the finger and thumb or biting between the teeth, if it causes a squeak it will indicate its condition for separating from the whey. This may be done by straining through a cloth of fine wire mesh. After the whey has been drawn off press the curd into moulds and put moulds under a continual pressure for about one hour. By this time the curd will have taken on a cheese shape, when it may be removed

from the moulds, covered with cheese cloth and put back into the moulds and repressed for about ten hours. The pressure required is about 100 pounds for a cheese about eighteen inches in diameter. This, however, is not important. After the cheese has been pressed ten hours and well formed it may be taken out and put into a strong brine. The brine should be a complete saturation. It should be kept in the brine from twenty-four to thirty hours, when it may be taken out and put in a curing room.

To cure cheese properly but two things are necessary, and these are: A low temperature and a moist air. This may be found in a cold, damp cellar or an underground root house. It should not freeze nor be exposed to a temperature above 70 degrees. It is a very good plan to coat the cheese with paraffin after they have been taken out of the brine and dried. This may be done by submerging in paraffin heated to a smoking heat. The paraffin will fill all the meshes and close the cheese, protecting it from loss of butter-fat or water, also from mould or insect injury. It will require from two to four months to cure the cheese, but some prefer to eat it before it becomes cured, and with the gouda it will be found of a palatable nature a few weeks after making, if not kept in too cold a place.

For a cheese vat a wash boiler may be used; a toast rack can take the place of a curd knife; a peck measure with nail holes in the sides and a wood follower will answer for mould, and a 4x4 stuck under a fulcrum and weighted by a pile of bricks will make a fairly good cheese press.

PREPARING FOR VICTORIA EXHIBITION.

The British Columbia Agricultural Association under whose auspices the Provincial exhibition is held in Victoria, is exerting every effort to make the annual exhibition this year the grandest and best that has ever been held in British Columbia. The exhibition opens on September 24th and remains open until the 28th, giving four clear days. Applications for space are already being received and it is confidently expected that the buildings will be taxed to their utmost. Seeing the necessity of securing more available space the association during the past year purchased an additional 63 acres and it now has the finest fair grounds west of Toronto.

In every department there will be a large increase over last season and when it is considered that the exhibition last year proved a grand success, there is every reason to suppose that this year's effort will eclipse all past attempts. The committee of management has secured material assistance from the Canadian Pacific Railway, which has kindly granted half fare rates from all points on their lines West of Calgary.

On freight full rates will be collected, but on the presentation of a voucher from the secretary the goods will be returned free of charge, making it virtually half rates. A feature of the exhibition will be the district exhibits. Already applications have been received from three districts and it is understood that at least four others will enter. The prize for this display this year has been raised \$300. In addition to this the display of stock is expected to be larger. Already information has been received from points in the Northwest that a large number of cattle and horses will be sent forward. Exhibits from as far East as Toronto will be on hand. In addition to this the breeders of the state of Washington are keenly interested and will send over several head to compete, while British Columbia owners will not be behind. For attractions the committee has arranged many special features. Four days' horse racing will be held for which prizes amounting to \$5,000 will be devoted.

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"No," answered the no less sincere statesman, "but it wasn't my fault if I couldn't catch the Speaker's eye."

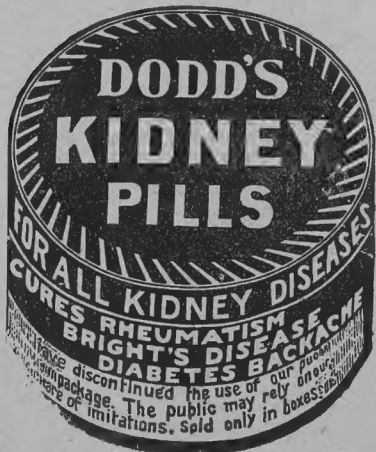
SHEEP FOR SALE

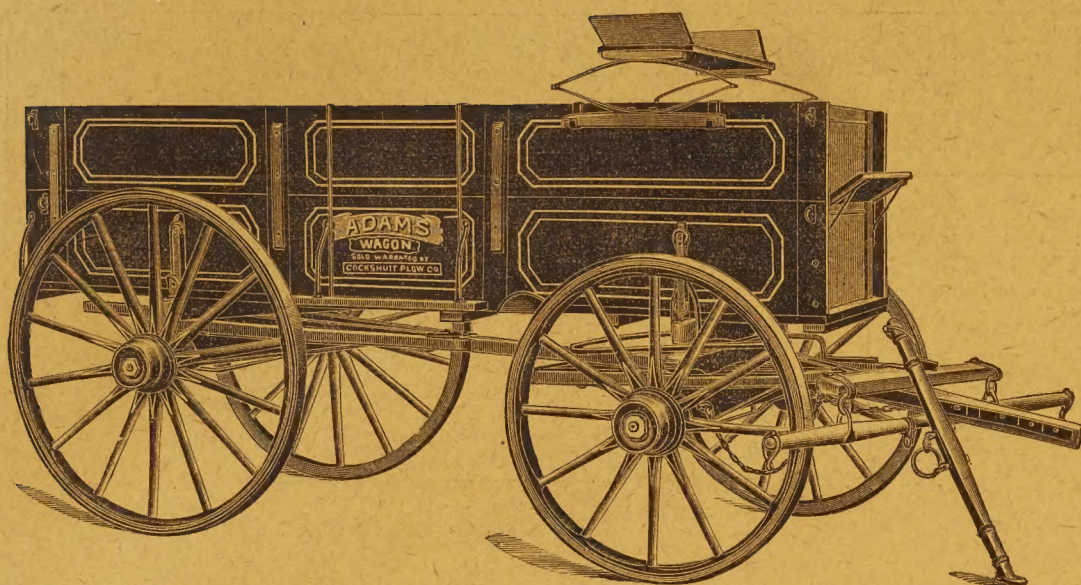
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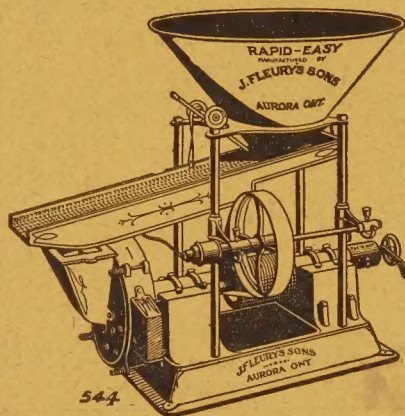
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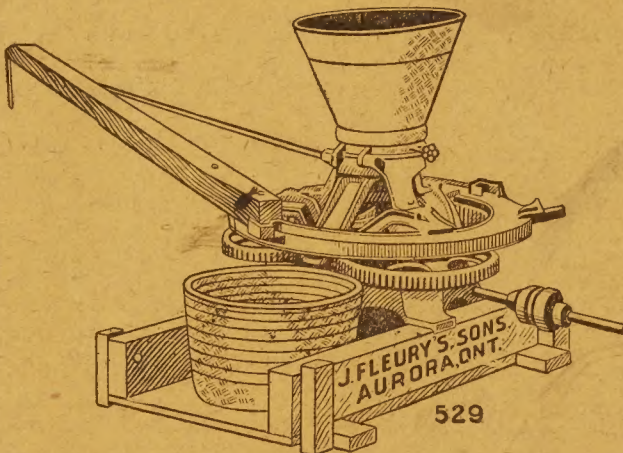
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